

# Whiting Forensic Hospital

## Interim Life Safety Measures

### 2018

#### I. Purpose

- A. **Interim Life Safety Measures** (ILSMs) may be required to temporarily compensate for the hazards posed by, but not limited to:
1. Construction projects.
  2. Interruption of fire suppression systems.
  3. Interruption of fire alarm and notification systems.
  4. Full or partial obstruction of exit passageways.
  5. Penetration of fire and smoke walls.

#### II. Policy

- A. **Interim Life Safety Measures** (ILSMs) will be **implemented** when various deficiencies in the Connecticut Fire Safety Code, National Fire Protection Association Life Safety Code® and/or construction hazards are recognized.
- B. The construction project or emergency event will be evaluated to determine which of the following measures are applicable:
1. Maintain free and unobstructed exits.
  2. Inspect the areas under ILSMs daily.
  3. Inform staff of the necessary additional safety measures and alternate exits when the area is designated under ILSMs.
  4. Maintain free and unobstructed access for emergency services.
  5. Maintain fire protection systems in good working order or perform fire watches when they are out of service 4 or more hours in a 24 hour timeframe – CVH Dispatch will notify South Fire of any patient care building fire suppression or fire alarm service disruption greater than 4 (four) hours in a 24 hour period. The Plant Facilities Engineer will contact the State Fire Marshall and DPH the next business day.
  6. Provide temporary but equivalent systems when any system is impaired. Temporary systems must be inspected and tested monthly.
  7. Check temporary but equivalent partitions to determine they are smoke-tight and built of non-combustible or limited combustible materials.
  8. Provide additional fire-fighting equipment and train personnel in its use.
  9. Prohibit smoking in the facility (especially contractors) and in areas adjacent to construction.
  10. Maintain acceptable storage, housekeeping, and debris removal practices that reduce the building flammable and combustible fire load to the lowest feasible level.
  11. Conduct a minimum of two fire drills per shift per quarter.
  12. Perform increased surveillance of buildings, grounds and equipment, with special attention to excavation, construction areas, construction storage, and field offices.
  13. Train personnel to compensate for impaired structural or compartmentalization features of fire safety.
  14. Conduct organization-wide safety education programs to promote awareness of Life Safety Code® deficiencies, construction hazards, and ILSMs.

### **III. Procedures**

#### **A. Construction and Renovation Planning**

1. During the planning phase for construction or renovation projects, Construction and Design and/or Facilities Services will conduct a risk assessment to determine what hazards may be encountered during the project.
2. During the construction risk assessment meeting, the Environmental Health and Safety Interim Life Safety Measures Assessment form, found in Appendix A, will be used and filled out by either the Hospital Safety Director, Project Manager/Facilities Services Manager. A determination will be made on whether or not possible life safety hazards would be encountered during the construction project that would require ILSMs be initiated.
3. When the need for ILSMs is recognized, the person initiating the ILSM will determine which ILSM process will need to be implemented during the construction or renovation project.

#### **B. Fire Protection System Failure Interim Life Safety Measures**

1. It is recognized system failures occur even when proper maintenance procedures are performed. Because of the need for immediate action in the event of a fire protection system failure, some initial changes are required in the procedures of setting up ILSMs.
2. When a fire alarm or sprinkler system failure occurs unexpectedly the following procedures will be followed:
  - a) When the emergency requires the need to develop ILSMs, the Plant Facilities Engineer will be notified by calling (860) 262-5725 (Bernie Szreders) or (860) 262-5720 (Jason Szczesniak). The Plant Facilities Engineer will determine what ILSMs will need to be implemented and will verify that the following is performed:
    - (1) Notification to the on duty supervisor of the affected area that ILSMs are being implemented in that area.
    - (2) Posting updated fire evacuation plans of the affected area, showing alternate exits as needed.
    - (3) Providing additional fire protection equipment in the affected area if needed.
    - (4) Initiate a fire watch as needed.
    - (5) Notify the fire department and other agencies of the impaired system as needed.
  - b) Systems failure related to the fire alarm system or sprinkler system are considered a priority and are to be repaired and corrected as quickly as possible.

#### **C. Interim Life Safety Measures Implementation**

1. When the determination has been made that ILSMs need to be implemented, the following procedures will be completed and documented on ILSM forms:
  - a) Prior to start of construction, the ILSMs initiation form, found in Appendix B, will be completed by the person initiating the ILSMs and sent to the department management of the areas affected and the other department noted at the bottom of the form. Upon implementation of ILSMs the person initiating the ILSMs will:
    - (1) Notify department management in all the areas being placed under ILSMs.
    - (2) Ensure updated fire evacuation plans of the affected areas show alternate exit(s) as needed.
    - (3) Indicate the estimated time frame of the ILSMs on the initiation form.
    - (4) Ensure that additional fire protection safety equipment will be available as needed.
    - (5) Staff training will be provided for the following:
      - (a) Location and operation of additional fire protection equipment as needed.
      - (b) Alternate exits and travel routes identified in and around the construction area.
      - (c) Additional steps and requirements needed to compensate for impaired structural or smoke/fire compartmentalization features for fire safety.
    - (6) Information is shared with all staff in the department as soon as possible and without delay.

2. In addition to the above, Construction and Design and/or Facilities Services staff or their designee will perform the following.
    - a) Perform daily inspections of the affected areas and complete the ILSM Daily Survey document to ensure that all ILSMs are in place and being properly maintained. The daily inspection will be documented on the daily inspection form in Appendix E of this policy.
  3. Any deficiencies noted during the inspection will be corrected as soon as possible. All corrective actions will be documented on the same inspection document that the issue was noted.
  4. A minimum of two fire drills per shift per quarter will be conducted and documented by Environmental Health and Safety.
  5. Upon completion of the construction project and termination of ILSMs:
    - a) The ILSM Termination document found in Appendix C will be completed and sent to all departments that were affected by the project.
    - b) Permanent fire evacuation plans will replace temporary plans, showing any new and/or reopened exits.
- D. Training
1. Construction Project Managers, Facilities Services Engineers, Emergency Response Team Members, Environmental Health and Safety Officers and any other staff member who is authorized to initiate, perform daily surveys and/or terminate ILSMs, will be trained in the policies, procedures and documentation.
  2. Staff members will be knowledgeable of the ILSMs procedures. This training is included in the annual Learning Leak training.
- E. Documentation
1. **All** daily and weekly ILSMs documentation will be forwarded to Plant Operations located in the Cotter building.
  2. Plant Operations will maintain all ILSMs documentation for a period of three years.

#### IV. Resources

- A. JCAHO, (2005) Hospital Accreditation Standards, EC.5.50, pp. EC-25.
- B. NFPA 101 (2000) Life Safety Code Handbook: General Requirements, Chapters 4, 9, 18, and 19.

# Appendix A

## Environmental Health and Safety Interim Life Safety Measures Assessment

**Please Note: After performing the ILSM assessment, permit must be brought to Fire Services for final approval before the project can start.**

Project Name:	Date of Construction Risk Assessment:
Project Manager:	Construction Contractor:
<b>Fire Services:</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <span><b>Approved</b></span> <input style="width: 40px; height: 20px;" type="checkbox"/> <span><b>Denied</b></span> <input style="width: 40px; height: 20px;" type="checkbox"/> </div>
<b>Assessment Questions</b>	

Life Safety Questions	Yes	No	If yes, what is involved?
1. Will the project compromise any of the following? <ul style="list-style-type: none"> <li>Reduce the required number of exits.</li> <li>Restrict the required width of exit access, exits, or exit discharge locations.</li> </ul>			
2. Will the project penetrate or impair any fire/smoke barriers (walls, doors, windows, deck slabs, etc.)			
3. Will the project obstruct access to emergency services and for emergency responders (Police, Fire, or EMS)?			
4. Will the fire alarm or suppression system be impaired at any time during the project?			
5. Will the project involve any hot work? (Cutting, welding, brazing, or other open flame devices)			
6. Will the project involve the presence of large quantities of combustible storage or debris?			

<input style="width: 30px; height: 30px;" type="checkbox"/>	Interim Life Safety Measures <b><u>are not</u></b> required.	<b>***Note: This must be determined by the Plant Facilities Engineer***</b>
<input style="width: 30px; height: 30px;" type="checkbox"/>	Interim Life Safety Measures <b><u>are</u></b> required. (Check below all that apply)	
<input style="width: 30px; height: 30px;" type="checkbox"/>	1.	Ensure free and unobstructed exits. Staff receives additional information/communications when alternative exits are designated. Building or areas under construction must maintain escape routes for construction workers at all times and the means of exiting construction areas are inspected daily.
<input style="width: 30px; height: 30px;" type="checkbox"/>	2.	Ensure free and unobstructed access to emergency services and for fire, police, and other emergency forces.
<input style="width: 30px; height: 30px;" type="checkbox"/>	3.	Ensuring that fire alarm, detection, and suppression systems are in good working order. A temporary but equivalent system must be provided when any system is impaired. Temporary systems must be inspected and tested monthly.
<input style="width: 30px; height: 30px;" type="checkbox"/>	4.	Ensuring that temporary construction partitions are smoke-tight and built of noncombustible or limited combustible materials that will not contribute to the development of spread of fire.
<input style="width: 30px; height: 30px;" type="checkbox"/>	5.	Providing additional fire-fighting equipment and training staff in its use.
<input style="width: 30px; height: 30px;" type="checkbox"/>	6.	Prohibiting smoking throughout the hospital's buildings and in and near construction areas. * Note: This is not applicable as it is automatically cover by a hospital-wide no smoking policy in any of the hospital buildings.
<input style="width: 30px; height: 30px;" type="checkbox"/>	7.	Developing and enforcing storage, housekeeping, and debris removal practices that reduce the buildings flammable and combustible fire load to the lowest feasible level.
<input style="width: 30px; height: 30px;" type="checkbox"/>	8.	Conducting a minimum of two fire drills per shift per quarter.

Assessment Questions Cont'd			
	9.	Increasing surveillance of buildings, grounds, and equipment, with special attention to excavations, construction areas, construction storage, and field offices.	
	10.	Training staff to compensate for impaired structural or compartmentalization features of fire safety.	
	11.	Conducting hospital-wide safety building deficiencies, construction hazards, and ILSMs.	
Additional Comments:			
Other Potential Risks			
Issues	Risk?		Action / Comments
	Yes	No	
Construction Access Route			
Noise			
Vibration			
Air Quality			
Utility Disruptions			
Operational Disruptions			
Equipment Danger /Risk			
Additional Comments / Requirements:			

## Appendix B

# INITIATION of Interim Life Safety Measures

### Environmental Health and Safety

Date ILSM Initiated: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px;"></span>	Time: <span style="border: 1px solid black; display: inline-block; width: 50px; height: 20px;"></span>	Person Initiating ILSM:
Approximate Duration of ILSM's:		Name: <span style="border: 1px solid black; display: inline-block; width: 300px; height: 20px;"></span>
		Title: <span style="border: 1px solid black; display: inline-block; width: 300px; height: 20px;"></span>

Areas/Units affected:	1	
	2	
	3	

Nature of Deficiency(s):	Describe:		
Plan for Equivalent Protection:	Describe:		
What special requirement or information is needed for staff in affected areas:	Note Requirements:		
Notification: (All departments checked are to be notified of ILSM initiation. Add additional departments if required.)	<table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Management of Affected Area  <input checked="" type="checkbox"/> Environment Health and Safety  <input checked="" type="checkbox"/> Campus Police &amp; Public Safety  <input checked="" type="checkbox"/> Infection Control  <input checked="" type="checkbox"/> Facility Services </td> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Construction and Design  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </td> </tr> </table>	<input checked="" type="checkbox"/> Management of Affected Area <input checked="" type="checkbox"/> Environment Health and Safety <input checked="" type="checkbox"/> Campus Police & Public Safety <input checked="" type="checkbox"/> Infection Control <input checked="" type="checkbox"/> Facility Services	<input checked="" type="checkbox"/> Construction and Design <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> Management of Affected Area <input checked="" type="checkbox"/> Environment Health and Safety <input checked="" type="checkbox"/> Campus Police & Public Safety <input checked="" type="checkbox"/> Infection Control <input checked="" type="checkbox"/> Facility Services	<input checked="" type="checkbox"/> Construction and Design <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

## Appendix C

# TERMINATION of Interim Life Safety Measures

### Environmental Health and Safety

Date ILSM Terminated:	Time:	Person Terminating ILSMs:
		Name:
		Title:

Areas/Units affected:	1	
	2	
	3	

Due to completion of the construction and/or repair of the affected Life Safety systems, you are hereby notified that the Interim Life Safety Measures initiated for your work area are no longer necessary. Standard policy and procedures should now apply.

<b>Notification:</b> (All departments checked are to be notified of ILSM terminated). Additional department identified on the initiation sheet will need to be notified.	<input checked="" type="checkbox"/>	Management of Affected Area	<input checked="" type="checkbox"/>	Construction and Design
	<input checked="" type="checkbox"/>	Environmental Health and Safety	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Campus Police & Public Safety	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Facility Services	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Infection Control	<input type="checkbox"/>	

## Appendix D

### Fire Watch Documentation Form

**Project Name / Location:**

This form shall be used to document the Fire Watch requirements for Interim Life Safety Measures. The person responsible for conducting the Fire Watch shall perform a surveillance of the area hourly and document the survey on this form. Please comment on any abnormal situations. If an actual emergency is noted, follow the necessary procedures.

#### **Rescue, Alarm, Contain, and Extinguish (R.A.C.E.)**

Date	Time	Person Conducting Fire Watch	Comments



## Appendix E

### Interim Life Safety Measures Daily Survey Document

Area Surveyed:	Inspector:	Date of Survey:
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A. ILSM Documentation		Yes	No	N/A
1.	ILSMs initiation documents have been completed and forward to required departments?			
<b>B. Exits</b>				
1.	Exits are easily accessible, are clear and unobstructed for areas affected by ILSM?			
2.	Staff in affected area received training for alternative routes?			
4.	Exit signage and directional signage is clear and understandable for patients, visitors, staff, and construction staff?			
<b>C. Emergency Services Access</b>				
1.	Entrance to Emergency Services is unobstructed and easily accessible?			
2.	Free and unobstructed access for Police, Fire, and other Emergency Services?			
<b>D. Fire Detection and Suppression Equipment</b>				
1.	Fire alarms and suppression systems are operational and functioning properly?			
2.	Temporary fire alarms and suppression systems have been tested monthly?			
3.	Additional firefighting equipment (e.g. fire extinguishers) and training has provided for personnel in the affected areas?			
<b>E. Additional Safety</b>				
1.	“No Smoking” Policy is enforced throughout and around the construction area?			
2.	Temporary construction partitions are smoke tight and built of noncombustible or limited combustible material (flame retardant plastic)?			
3.	Storage of flammable and combustible materials in the construction area is kept to the minimum?			
4.	Construction debris, food, and food waste is removed daily?			
5.	Conducting a minimum of two fire drills per shift per quarter during the ILSM?			
6.	Staff in the area of the ILSMs have been notified, and have received training for impaired structural or compartmentalization features of fire safety?			
7.	Is power properly secured at the end of each workday?			
<b>F. Infection Control</b>				
1.	Barriers are airtight and prohibit airflow between clean and dirty areas?			
2.	Ceiling tiles in areas adjacent to the construction areas are in place at all times?			
3.	Proper traffic routing signage is present in and around the construction area and is appropriate as agreed upon with Infection Prevention and Control?			
4.	HEPA filters are used to prevent airborne particles from migrating to patient care areas and helps maintain negative pressure in the construction area?			
5.	All doors and windows in the area are kept closed to prevent circulation of debris and dust?			
6.	Areas adjacent to the construction area are kept clean of dust and debris at all times?			
7.	There is no evidence of water leaks or mold?			
8.	No evidence of standing water in containers, sinks, or toilets in the construction area?			

**Appendix E**  
**Interim Life Safety Measures Daily Survey Document Cont'd**

**If "No" is answered for any questions above, indicate the issue in the comments section below and what steps were taken to correct the issues. Add additional comments using the back of this sheet for additional space if needed.**

Comments:
