Interim Life Safety Measures (ILSM) 101

Codes and Regulatory Compliance Track

Making healthcare remarkable

NOVANT HEALTH

1

Course Learning Objectives

1. Define **interim life safety measures** (ILSM), describe their purpose, and list the building systems to which they apply
2. Describe the **standard protocols** to immediately follow when life safety deficiencies are detected and confirmed
3. Discuss and demonstrate the **standard Novant Health** ILSM assessment process
4. List **response measures** that might occur when life safety deficiencies occur

NOVANT HEALTH

2

learning objective 1: ILSM, their purpose, and their applicable building systems

NOVANT HEALTH

3

Interim Life Safety Measures (ILSM)

Interim Life Safety Measures are **health and safety measures** that are put in place when maintenance and construction activities impact the facility's life safety systems.

Implementation involves an administrative process that is used to **document and reconcile** a recognized Code deficiency and/or life safety impairment.

Interim life safety measures offset or compensate for **impaired** life safety features. For example, most construction activities will temporarily impair life safety features.

4

Interim life safety measures are required for **impaired** (or potentially impaired) life safety systems.

Interim life safety measures are **required by The Joint Commission** for accreditation and licensing.

Applicable Systems and Components

- fire suppression system
- fire alarm system
- fire and smoke doors
- egress pathway, emergency exits, and related signage

NOVANT HEALTH

5

Interim life safety measures are critical to continuous building occupant safety when an immediate threat to life occurs.

Immediate Threat to Life: may potentially have serious adverse effects on the health of the patient, resident, or individual served
source: The Joint Commission

Interim life safety measures only have to be assessed when the deficiency cannot be **immediately** fixed.

Implementing these measures provides a safe environment

- when a life safety deficiency is discovered during scheduled inspection, testing, and maintenance activities
- during a construction project
- when a life safety deficiency is discovered during environmental rounding

NOVANT HEALTH

6

Fire Alarm System

Implement interim life safety measures if fire alarm pull stations, smoke detectors, heat detectors, or other fire alarm system elements are **inaccessible**, **damaged**, or **broken**.

Photos depict actual deficiency examples discovered in healthcare facilities.

NOVANT HEALTH

7

Fire Suppression System

Implement interim life safety measures if fire suppression systems are **damaged** or rendered **unavailable for immediate use**.

Photos depict actual deficiency examples discovered in healthcare facilities.

NOVANT HEALTH

8

Egress Pathway and Exit Signs

Implement interim life safety measures if an exit pathway is **blocked** or **obstructed**, or if the exit pathway **lighting is not operational**.

Photos depict actual deficiency examples discovered in healthcare facilities.

NOVANT HEALTH

9

Egress Pathway and Exit Doors

Implement interim life safety measures if activities, materials, or equipment storage **obstruct accessibility** to and through corridors, exit pathways, stairs, etc.

Photos depict actual deficiency examples discovered in healthcare facilities.
*The locked door is a life safety deficiency showing an **immediate jeopardy to life**.*

NOVANT HEALTH

10

Egress Pathway and Exit Doors

Sometimes, an exit that is normally used to leave the building is **not available** or can only be used in an emergency.

If this is the case, then:

- Install or post alternate exit signage to re-direct staff, visitors, patients, and others to the closest and safest way out of the building.
- Place alternate exit signage in and near the affected area.
- Educate staff of the necessary changes for exiting the building.

NOVANT HEALTH

11

Fire and Smoke Doors

Perform an ILSM assessment if a fire or smoke door is **damaged**, **broken**, or **does not fully close or latch** appropriately.

Photos depict actual rated door deficiencies discovered in healthcare facilities.

*Remember, interim life safety measures apply to **rated** doors only.*

NOVANT HEALTH

12

Fire and Smoke Door Labels

Perform an ILSM assessment if a fire or smoke door label is **damaged**, **covered**, **missing**, or inaccurately labeling a door.

Non-Compliant: The fire door number, fire rating, and other information is scratched off or covered up.

Figure 1 Fire Door Label, Temp. Rise with Latch Throw

Compliant: All rating and door type information is clearly marked and labeled.

NOVANT HEALTH

13

Fire Separations

Perform an ILSM assessment if a fire separation has **holes**, **penetrations**, **unprotected openings**, or **non-functioning** fire and/or smoke dampers.






Photos depict actual life safety deficiencies discovered in healthcare facilities:

- *fire dampers with wires running through them*
- *blocked fire damper inspection hatches*
- *improper fire wall penetrations*

NOVANT HEALTH

14

learning objective 2:
standard protocols when life safety deficiencies are detected and confirmed

NOVANT HEALTH

15

Standard Process | Deficiency Identification, Risk Assessment, ILSM Implementation, and Compliance Documentation

Risk Identification and Notification

Immediately notify the supervisory position and other affected staff about the deficiency.

ILSM Pre-Risk Assessment and ILSM Matrix

Complete the standard Interim Life Safety Pre-Risk Assessment and the standard Interim Life Safety Measures Risk Assessment Matrix.

Mitigation Plan

Develop a mitigation plan with some "must dos" and a measurement process. Implement the interim measures according to the plan.

Documentation

Document ILSM and any changes to the plan during implementation.

NOVANT HEALTH

16

Construction projects and large maintenance activities require an ILSM assessment before work begins.

The supervisor or project manager completes the Interim Life Safety Measures Risk Assessment **at least one week prior** to the start of the project.

If immediate work is required because of an unforeseen incident or an identified life safety deficiency, then Plant Engineering Services is **notified immediately**, and the ILSM assessment process is completed **without delay**.

Refer to the **Novant Health ILSM Policy** on Document Manager for more information about the ILSM risk assessment and implementation procedures.

NOVANT HEALTH

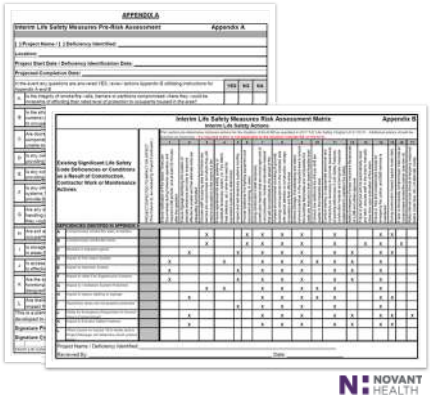
17

Standard ILSM Pre-Risk Assessment

First, the ILSM Pre-Risk Assessment (**Appendix A**) is used to determine if a deficiency or condition requires interim life safety measures.

Then, the ILSM Risk Assessment Matrix **(Appendix B)** is used to identify the minimum required actions for the deficiency.

The assessment and documentation is typically completed by a **supervisor** or **manager**.



NOVANT HEALTH

18

Standard ILSM Short Form for Non-Construction Activities

A full ILSM program may **not** always be necessary when life safety deficiencies occur.

Use the short form process when:

- a life safety deficiency is identified during environmental rounding, survey, regular maintenance, etc.

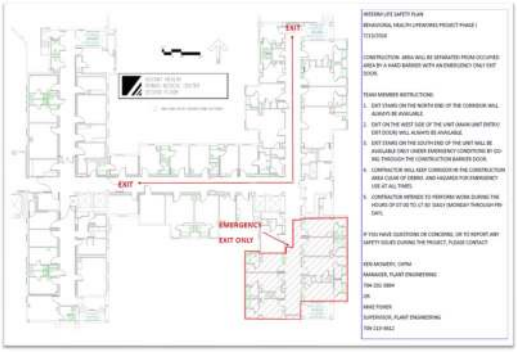
AND

- the deficiency cannot be corrected within 24 hours

NOVANT HEALTH

19

An Interim Life Safety Plan is developed by the supervisory position and communicated with appropriate staff.



NOVANT HEALTH

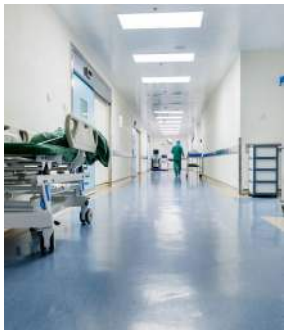
20

Patient Evacuation During ILSM Implementation

If patient evacuation is required, then the following steps should be taken.

1. **Horizontal Evacuation.**

- Move patients to the next fire/smoke compartment that is not compromised.
- Remember, if there is a deficiency, then 2 compartments are compromised (wall/damper/door) between the compartments.



NOVANT HEALTH

21

Patient Evacuation During ILSM Implementation

If Horizontal Evacuation is not possible, then:

2. Vertical Evacuation

- Move patients at least one floor below the fire event.

If Horizontal and Vertical Evacuation are not possible, then:

3. Complete Evacuation

- Move patients to a pre-determined staging area for transport to other facilities.

NOVANT HEALTH

22

learning objective 3: standard Novant Health ILSM assessment process and documentation

NOVANT HEALTH

23

ILSM Process Management and Documentation

First, refer to the **ILSM policy** for guidance on the assessment and implementation process.

An **Interim Life Safety Measures Pre-Risk Assessment** is conducted by qualified personnel.

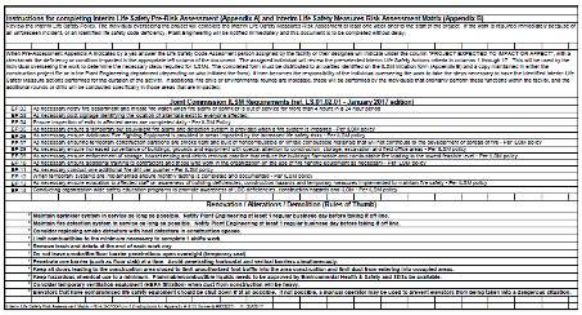
If for a **construction project**, then the Pre-Construction Risk Assessment (**PCRA**) is also performed.

Then, the **Interim Life Safety Measures Risk Assessment Matrix** is used to determine interim measures based on the deficiency.

If necessary, **an Interim Life Safety Plan** is developed, documented, and communicated to staff. Changes are also documented.

24

Instructions | Interim Life Safety Pre-Risk Assessment + Interim Life Safety Measures Risk Assessment Matrix



25

Standard Form | Interim Life Safety Pre-Risk Assessment

Appendix A

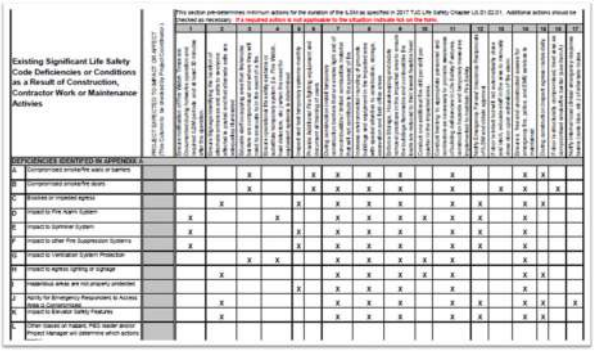
This form is a planning guide only.

Each item with a **"YES" response** may require its own, separate action plan with assigned responsibilities and a schedule.

Deficiencies that are identified in Appendix A will be used to determine appropriate measures using Appendix B.

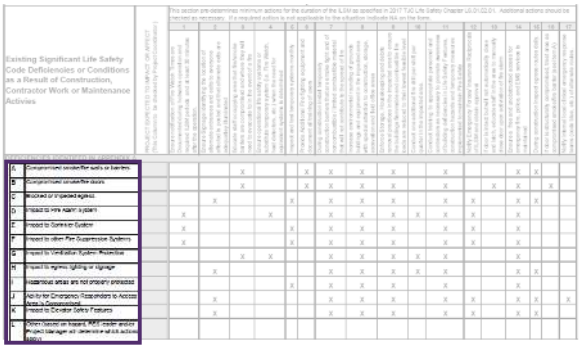
26

Standard Form | Interim Life Safety Measures Risk Assessment Matrix (Appendix B)



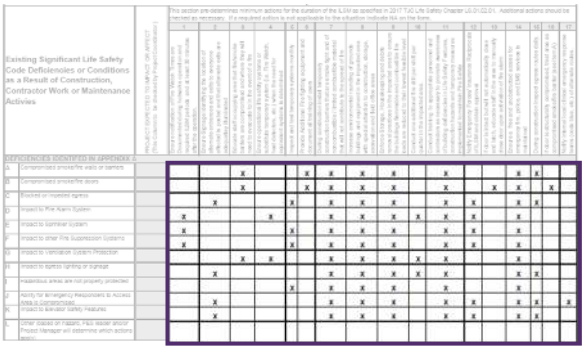
27

Locate the deficiencies identified in Appendix A.



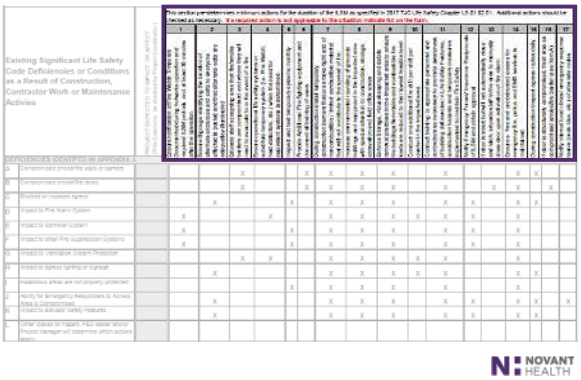
28

Locate the marked interim life safety measures that correspond to each identified deficiency.



29

As identified for each deficiency, implement these minimum actions for the duration of the Interim Life Safety Plan.



30

Construction projects require additional documentation.

Additional standard forms related to interim life safety measures include:

- Appendix C, Initiation of Interim Life Safety Measures
- Appendix D, Termination of Interim Life Safety Measures
- Appendix E, Interim Life Safety During Construction and Renovation Projects Checklist
- Appendix F, Fire Watch Procedures (to be documented with the standard Fire Watch Log)

The **contractor completes Appendix E daily** and provides enough copies (as determined by the facility) **each week** to the Novant Health Public Safety Office.

NOVANT HEALTH

31

Standard ILSM Short Form for Non-Construction Activities

The ILSM Risk Assessment short form can be used for the following deficiencies:

- exit sign not illuminated, broken, missing, etc.
- impaired rated doors including rolling and sliding types
- fire or smoke dampers not functioning properly, not accessible, or other
- impaired smoke/heat/duct detectors
- impaired or blocked pull station
- sprinkler not functioning properly, leaking, corroded, dirty, etc.
- missing or impaired fire extinguisher
- impaired kitchen Ansul system
- other

NOVANT HEALTH

32

Standard ILSM Short Form for Non-Construction Activities

Identify the **device location** and its **bar code number** in the appropriate form field.

NOVANT HEALTH

33

Standard ILSM Short Form for Non-Construction Activities

Identify the **device location** and its **bar code number** in the appropriate form field.

Mark the identified deficiency from the options provided across the top of the form.

NOVANT HEALTH

34

Standard ILSM Short Form for Non-Construction Activities

Identify the **device location** and its **bar code number** in the appropriate form field.

Mark the identified deficiency from the options provided across the top of the form.

Mark the implemented interim life safety measure(s) and provided a brief explanation in the notes.

The **device is retested** after the deficiency is repaired, and the **results are documented** on the ILSM Short Form.

NOVANT HEALTH

35

Standard Form | ILSM Training Documentation

This form is a sample from an actual project.

Use this standard form to verify affected staff have **participated in** and acknowledge the administration of the **appropriate training** related to ILSM implementation.

Participating **staff sign off** on the training once it's complete.

This form is kept on file with other ILSM documents in **ATG**.

NOVANT HEALTH

36

learning objective 4: possible response measures when life safety deficiencies occur

37

When are interim life safety measures required?

Fire Alarm Out for 4+ Hours

Implement ILSM if the fire alarm system is out of service in an occupied building for more than **4 hours within a 24-hour period**.

Out of Service: Fire alarm pull stations, smoke or heat detectors, or other fire alarm elements are rendered inaccessible, damaged, or broken.

Fire Suppression Out for 10+ Hours

Implement ILSM if the fire suppression system is out of service in an occupied building for more than **10 hours within a 24-hour period**.

Out of Service: Fire suppression systems are damaged or rendered unavailable for immediate use.

If possible, install a **temporary but equivalent** system while the permanent system is impaired.

38

What if deficiencies cannot be immediately corrected?

The threshold for immediate correction is limited to 24 hours.

Signage

Post signage for alternate exiting.

Staff Education

Educate staff in affected areas.

If appropriate, provide additional training on building deficiencies, construction hazards, temperature measurements, etc.

Daily Inspections

Inspect routes of egress and exits in affected areas daily.

39

What is required if a fire occurs when the fire system is compromised?

When the fire system is non-functional for more than 10 continuous hours, then supply additional fire extinguishers in the affected areas.

Operator Notification
Call the operator to report the fire event.

Novant Health Fire Plan
Follow all fire procedures as outlined in the Novant Health Fire Plan.

Standby
Wait for any further instruction.
Wait for fire watch staff to provide an "all clear" notice.

FD Notification
The local fire department is notified.

NOVANT HEALTH

40

Response Measures | Out of Service Fire Alarm System

When the fire alarm system is taken out of service for more than 4 continuous hours, the following activities shall occur while the system is compromised:

Fire Watch
Conduct a fire watch in the affected areas.

Dedicated, Trained Staff
Fire watch staff must be a dedicated function, and the fire watch CBL is required.

Continuous Monitoring
Fire watch staff continuously tour the affected areas until the compromised system is restored.

FD Notification
The local fire department is notified.

NOVANT HEALTH

41

Response Measures | Impaired Fire Alarm System

When fire alarm systems are impaired (equivalencies) and cannot be immediately corrected, the following activities shall occur while the system is compromised:

Staff Education
Notify staff in affected areas. Conduct education programs to explain the ILSM and current life safety deficiencies, as necessary.

Additional Equipment
Provide additional firefighting equipment and train staff to compensate for impaired structural or compartmental fire safety features, as necessary.

Surveillance
Increase surveillance and conduct fire watches for buildings, equipment, grounds, excavation, field offices, etc. Enforce storage, housekeeping, and debris removal practices that reduce flammability and combustibility of fire loads.

NOVANT HEALTH

42

Response Measures | Impaired Fire Alarm System

When fire alarm systems are impaired (equivalencies) and cannot be immediately corrected, the following activities shall occur while the system is compromised:

Smoke-Tight Partitions

Ensure temporary construction partitions are smoke-tight or made of noncombustible or limited combustible materials.

Monthly Inspections

Inspect and test all temporary systems monthly.

Document testing dates and results.

Additional Fire Drills

Conduct additional fire drills in affected areas (1 additional drill per shift per quarter) during the time the interim life safety plan is in place, as required by The Joint Commission.

NOVANT HEALTH

43

Response Measures | Impaired Doors

When fire alarm systems are impaired (equivalencies) and cannot be immediately corrected, the following activities shall occur while the system is compromised:

Latch Issues

When a fire or smoke door does not latch or close properly, then consider assigning individuals to close the door (or alternate safety measure) until the repair is made.

Non-Compliant Gaps

When a gap between door leaves is greater than 1/8" or if the undercut of the door is greater than 3/4" (fire) or 1" (smoke), then install an astragal.

NOVANT HEALTH

44

Q&A

End of Interim Life Safety Measures (ILSM) 101
Training Session

Making healthcare remarkable

NOVANT HEALTH

45