Wildfire & WUI Readiness for Healthcare Facilities

Design, Code Compliance, and Operational Continuity

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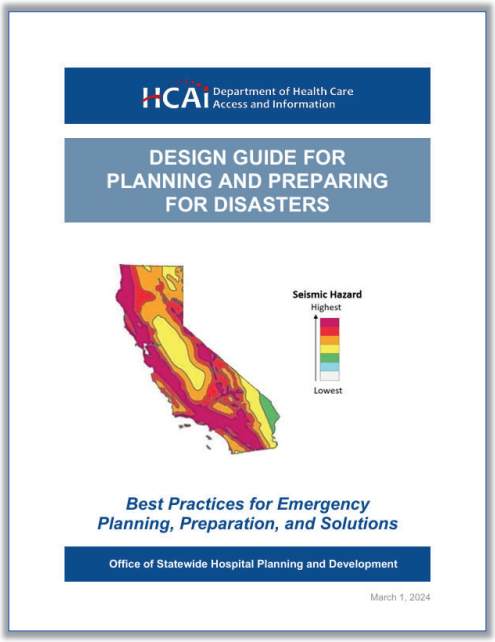
OSHPD
Office of Statewide Hospital Planning and Development

HBSB
Hospital Building Safety Board

Why A Guide?

- Facilities managers want to know what they can do to be prepared
- Provide a resource to help evaluate how past events could impact future regulations and design requirements
- Provide a repository of information during crucial times
  - ➢ The guide presents various scenarios and design options to aid facilities, staff, and design teams in understanding additions to facilities and planning for future flexibility effectively
- Limit “Anything Goes” policies!
- Best practices for facilities to be better prepared for a disaster



How to Apply the Guide

Alterations

- Planning for the unknown
- Providing flexibility in existing buildings
- What can be done ***now?***
- Adapting existing services and system
  - Facility access
  - Utility services
  - Emergency projects

New Facilities

- Planning for the unknown
- Go beyond code minimums during design
- Go beyond the code
- Include potential flexibility for future care types
- Identify options and provide best practices to allow for quick implementation

Who Should be Using the Guide

- Facility Operators
- Architectural and Engineering Design Teams
- Local Agencies, Planners
- Contractors
- Other people involved in planning for future impacts and reacting to situations when they arise

Purpose

At the start of the COVID 19 pandemic, facilities were struggling to find ways to provide safe patient care: safe for the staff as well as the patients.

OSHPD received many calls and questions as to what we were doing to assist.

In addition, people were asking what was going to change in how OSHPD did plan reviews and what code changes were anticipated for future code cycles.

OSHPD assembled people knowledgeable in healthcare regulations, planning, design, and operations. This included professionals, engineers, facility representatives, contractors, and many others that had experience in the many aspects of addressing and reacting to the pandemic and other emergencies.

The Emergency Design Task Force (EDTF) was born.

8

Emergency Design Task Force

The EDTF was tasked with identifying specific areas of concern for multiple types of events, such as pandemics, but also including wildfires and earthquakes amongst others. They were to look at how these past events could impact future regulations and design requirements.

It was determined that for normal everyday operations, the current regulations are fairly sufficient to meet the basic needs. Minor revisions are coming.

Adaptation

Adaptation

But what about those facilities that wanted to go above and beyond the basic needs?

Most, but not all, options to prepare for future events would most likely fit into this group.

The technology and processes learned would be optional approaches that a facility could decide to incorporate into their existing or proposed buildings. These options could include:

- switchable air volumes
- redundant services
- new technologies

If these were in place now, the facility would have flexibility in deployment in the future.

HCAI | HOSPITAL BUILDING SAFETY BOARD WEBINAR SERIES

2026 Schedule

Design Guide for Planning and Preparing for Disasters

Session 1 – May 14, 2026

Wildfire and Wildland-Urban Interface Readiness for HealthCare Facilities

A preparedness-focused webinar examining wildfire and wildland-urban interface (WUI) risks, mitigation strategies, and operational planning measures to help healthcare facilities enhance resilience, continuity, and life safety during wildfire events."

Session 2 – June 10, 2026

Designing Hospitals for Wildfire Smoke: HVAC Strategies for Resilience and Readiness

An expert-led webinar exploring HVAC design strategies, filtration technologies, and operational best practices that help healthcare facilities maintain safe indoor air quality and operational continuity during wildfire smoke events.

Session 3 – July 7. 2026

Power Resilience, Regulatory Compliance, and the Future of Healthcare Infrastructure

A forward-looking webinar examining how healthcare organizations can strengthen power resilience, navigate evolving regulatory requirements, and modernize infrastructure systems to support reliable patient care and operational continuity.

Session 4 – TBD

Beyond Minimums: Crafting Resilient Healthcare Facilities

A focused webinar on HVAC design, ventilation strategies, and air quality management practices that support infection prevention and control in healthcare environments.

Session 5 – TBD

Infection Control – HVAC + Operations

A healthcare design-focused webinar examining planning, material selection, and environmental design strategies that support effective infection prevention and control.

Session 6 – TBD

Hazard Vulnerability Analysis: A Systemic Approach to Risk Identification and Resilience Planning

A comprehensive webinar exploring hospital hazard vulnerability assessment methodologies, risk prioritization strategies, and preparedness planning to strengthen healthcare resilience and emergency readiness.

Register at: https://hcai.ca.gov/facilities/building-safety/resources/building-safety-construction-webinars/

Session Objectives: Building Code Literacy for Wildfire-Resilient Healthcare Design

Understand WUI Applicability

Learn the scope of Wildland-Urban Interface (WUI) applicability and how FHSZ designation impacts healthcare facility design and operational requirements.

Interpret Title 24 Part 7

Master the interpretation and application of Title 24 Part 7 standards specifically for healthcare facilities to ensure compliance and resilience.

Identify Vulnerabilities

Recognize critical design and operational vulnerabilities that could compromise patient safety and facility continuity during wildfire events.

Align Design Decisions

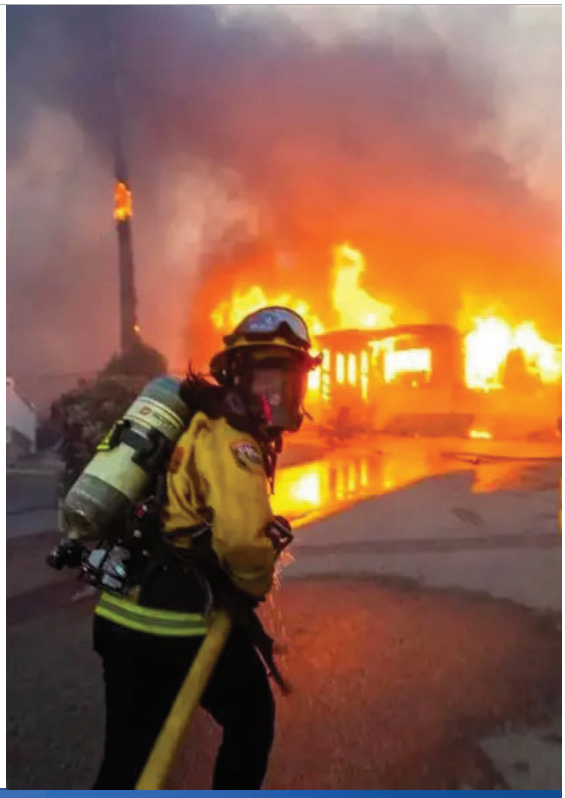
Coordinate design decisions with operational continuity planning to create integrated, comprehensive resilience strategies for healthcare facilities.

Establish Coordination Protocols

Develop and implement effective coordination protocols across multidisciplinary teams to ensure unified approach to wildfire-resilient design.

Why This Matters Now

- Wildfire behavior is evolving — longer seasons, higher intensity, wider impact zones
- Ember-driven ignition is the primary failure mechanism—not flame front
- Title 24 Part 7 consolidates and elevates expectations
- Increasing alignment between code compliance and operational resilience
- Hospitals must remain operational under degraded conditions, not simply protected



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AGENDA

1. Welcome & Introduction
2. What is WUI? Title 24 and the New Part 7
3. Are You in a Fire Hazard Severity Zone?
4. The Hazard & The Why
5. Operations & Emergency Planning
6. Q&A

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Wildland-Urban Interface (WUI) Designation Triggers Mandatory Design Requirements

WUI Interface Definition

The interface between the built environment and wildland vegetation where structures and other human development meet or intermingle with undeveloped wildland areas.

Designation by Fire Hazard Severity Zones

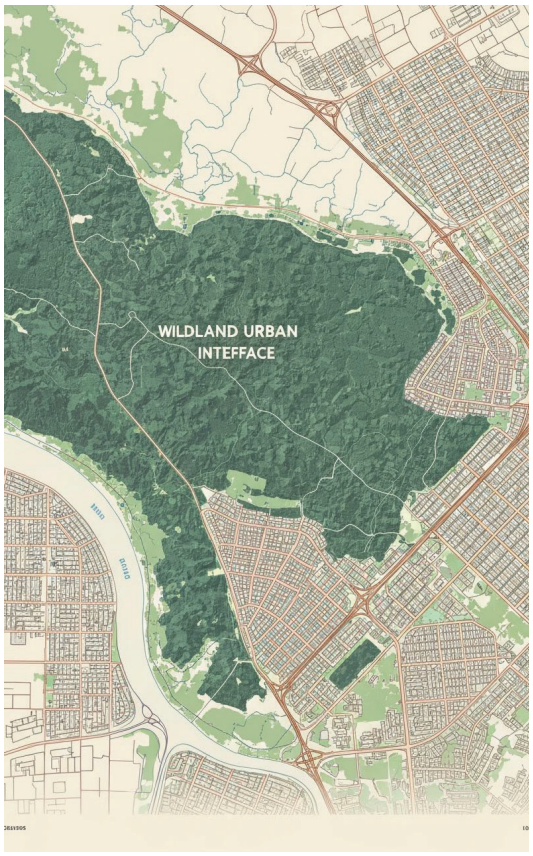
WUI designation is determined by Fire Hazard Severity Zones (FHSZ), which are based on hazard analysis and mapping of wildfire risk areas.

Zone Types and Local Designation

Includes State Responsibility Area (SRA), Local Responsibility Area (LRA), and locally designated zones that reflect regional wildfire risk assessment.

Activation of Mandatory Code Sections

WUI designation automatically activates specific mandatory code sections requiring enhanced design standards for building materials, defensible space, and fire-resistant construction.



WUI Exposure Risks for Healthcare Facilities

Hospitals located in or near Wildland-Urban Interface (WUI) areas are uniquely vulnerable to several critical hazards during wildfire events:

- **Ember Exposure:** Embers can travel long distances, igniting structures far from the main fire front. This poses a significant risk to building envelopes, roofs, and outdoor materials.
- **Radiant Heat:** Intense heat radiating from a wildfire can preheat structures and materials, leading to ignition even without direct flame contact. This is a major concern for the integrity of buildings and surrounding infrastructure.
- **Smoke Infiltration:** Dense smoke can compromise air quality within and around facilities, impacting patient and staff health. It can also hinder visibility, affecting emergency response and evacuation efforts.
- **Access Challenges:** Wildfires can lead to road closures, debris, and evacuation orders, severely limiting access for emergency services, staff, patients, and supplies. This can disrupt normal operations and emergency response capabilities.

Why FHSZ Matters

Importance of Fire Hazard Severity Zone (FHSZ) Designation

Determines Building Codes

Triggers specific specific construction standards for wildfire resistance.

Impacts Capital Planning

Crucial for budgeting and prioritizing facility upgrades and new construction.

Influences Insurance & Risk

Affects insurance premiums and the overall risk profile of healthcare facilities.

Affects Defensible Space

Mandatory compliance for mitigating immediate fire threats.

Guides Campus Hardening

Informs strategic planning for infrastructure resilience against wildfire risks.

Fire Hazard Severity Zones Directly Impact Design Cost, Material Selection, and Approval Timeline

Moderate Severity Zone

- **Classification:** Low-to-moderate fire risk
- **Code Applicability:** Standard building codes apply
- **Material Restrictions:** Limited material limitations
- **Impact:** Baseline design costs, standard approval timeline (4–6 weeks)

High Severity Zone

- **Classification:** Elevated fire hazard intensity
- **Code Applicability:** Enhanced fire-resistant standards triggered
- **Material Restrictions:** Fire-rated materials required for exterior and structural elements
- **Impact:** 20–30% cost increase, extended approval (8–10 weeks)

Very High Zone

- **Classification:** Extreme fire hazard severity
- **Code Applicability:** Strict defensible-space and hardening requirements
- **Material Restrictions:** Non-combustible materials mandatory; special systems (ember-resistant venting) required
- **Impact:** 40–60% cost premium, extended approval (12–16 weeks) and potential redesign

Key Takeaway: Early FHSZ confirmation prevents costly redesign and ensures optimal material selection from project inception.

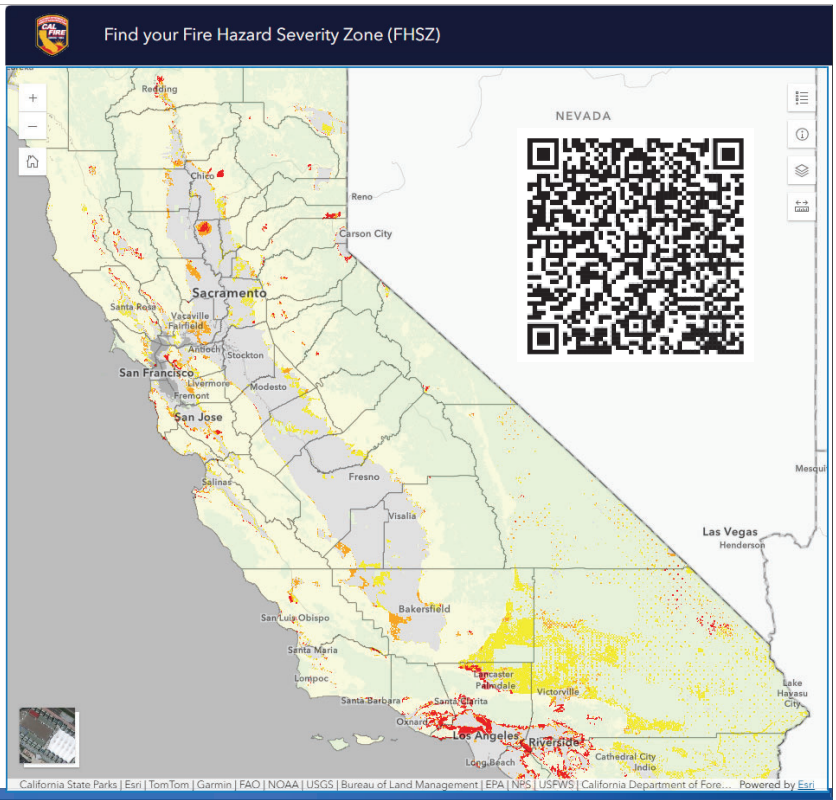
How to Determine Your Facility's FHSZ

Use CAL FIRE FHSZ maps

- Access the official maps provided by CAL FIRE to identify the designated Fire Hazard Severity Zones within your area.

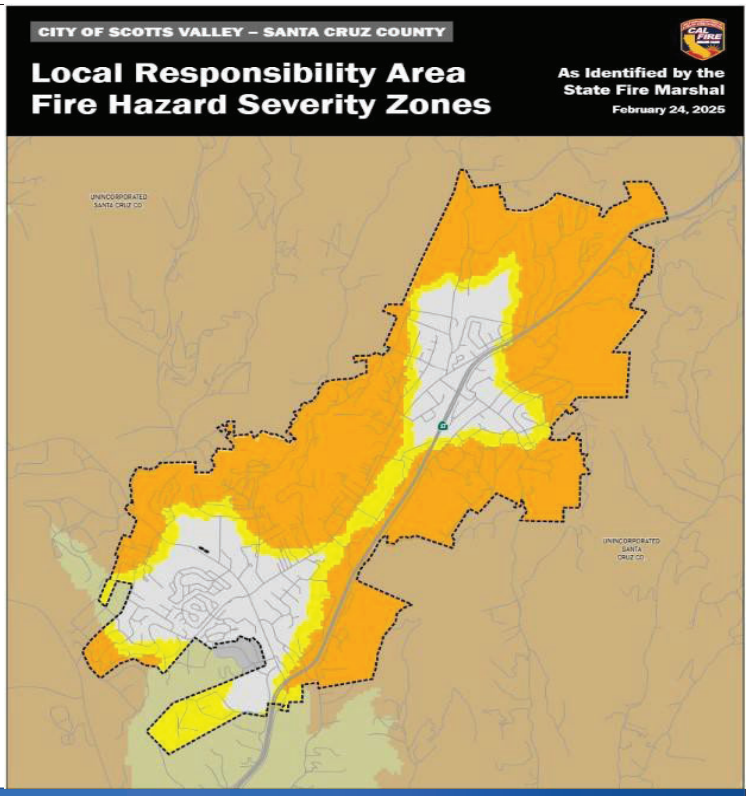
Review HCAI GIS layers

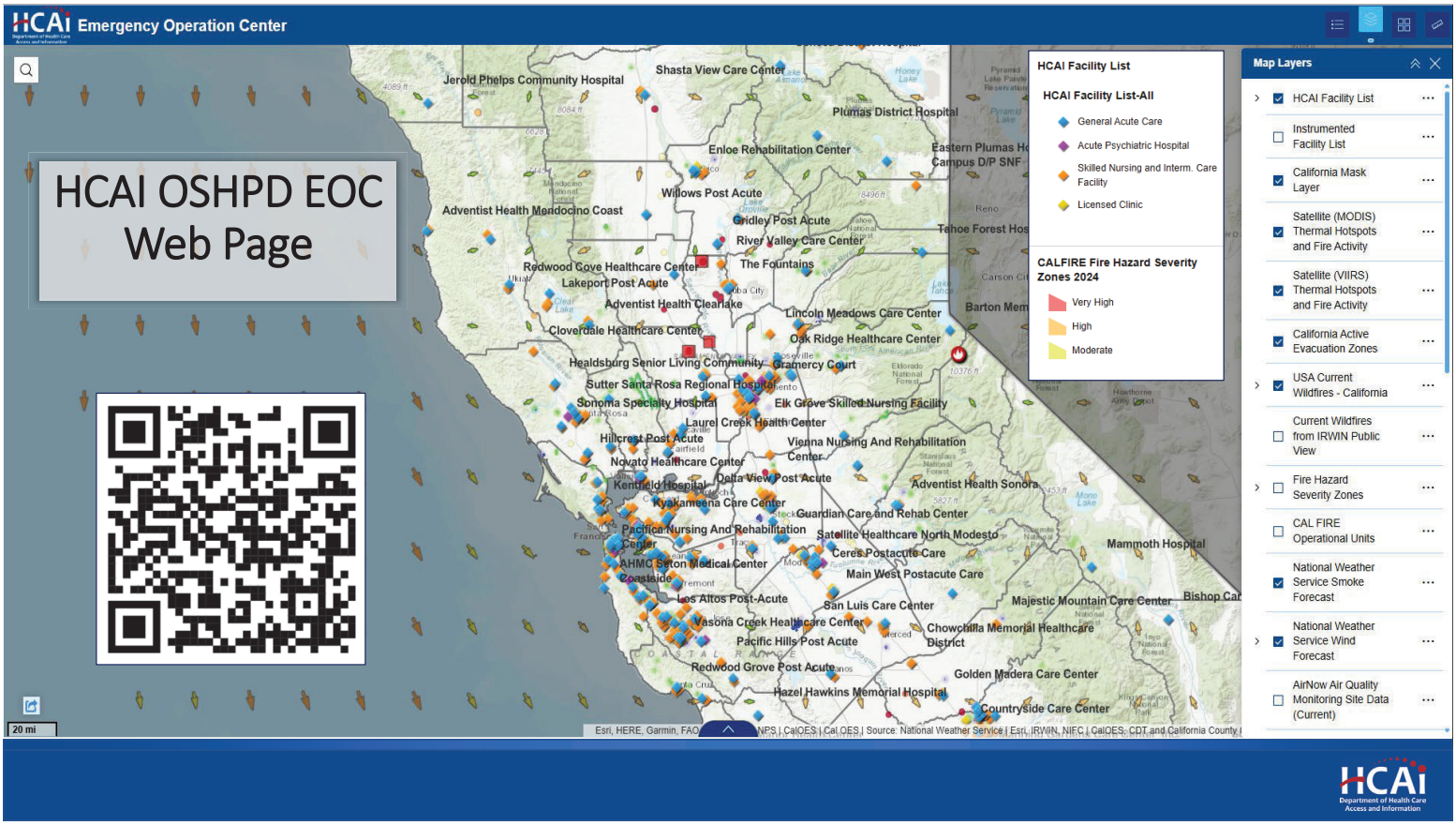
- Review the Geographic Information System (GIS) layers available through HCAI, which often integrate FHSZ data relevant to healthcare facilities.



Fire Hazard Severity Zones (FHSZ)

- Designated as: Moderate, High, or Very High
  - Mapped by CAL FIRE for State Responsibility Area (SRA)
  - Local agencies designate Local Responsibility Area (LRA) zones
  - FHSZ designation triggers regulatory requirements
  - Applies to new construction and certain site conditions




HCAI Emergency Operation Center
HCAI OSHPD EOC Web Page
HCAI Facility List
HCAI Facility List-All
General Acute Care
Acute Psychiatric Hospital
Skilled Nursing and Interm. Care Facility
Licensed Clinic
CALFIRE Fire Hazard Severity Zones 2024
Very High
High
Moderate
Map Layers
HCAI Facility List
Instrumented Facility List
California Mask Layer
Satellite (MODIS) Thermal Hotspots and Fire Activity
Satellite (VIIRS) Thermal Hotspots and Fire Activity
California Active Evacuation Zones
USA Current Wildfires - California
Current Wildfires from IRWIN Public View
Fire Hazard Severity Zones
CAL FIRE Operational Units
National Weather Service Smoke Forecast
National Weather Service Wind Forecast
AirNow Air Quality Monitoring Site Data (Current)
Jerold Phelps Community Hospital
Shasta View Care Center
Plumas District Hospital
Enloe Rehabilitation Center
Willows Post Acute
Adventist Health Mendocino Coast
Gridley Post Acute
River Valley Care Center
Redwood Cove Healthcare Center
The Fountains
Lakeport Post Acute
Adventist Health Clearlake
Lincoln Meadows Care Center
Cloverdale Healthcare Center
Oak Ridge Healthcare Center
Healdsburg Senior Living Community
Gramercy Court
Sutter Santa Rosa Regional Hospital
Sonoma Specialty Hospital
Elk Grove Skilled Nursing Facility
Laurel Creek Health Center
Hillcrest Post Acute
Vienna Nursing And Rehabilitation Center
Novato Healthcare Center
Kentfield Hospital
Delta View Post Acute
Adventist Health Sonora
Kyakameena Care Center
Guardian Care and Rehab Center
Pacifica Nursing And Rehabilitation Center
Satellite Healthcare North Modesto
Ceres Postacute Care
AHMC Seton Medical Center Coastside
Main West Postacute Care
Los Altos Post-Acute
San Luis Care Center
Majestic Mountain Care Center
Vasona Creek Healthcare Center
Chowchilla Memorial Healthcare District
Pacific Hills Post Acute
Redwood Grove Post Acute
Golden Madera Care Center
Hazel Hawkins Memorial Hospital
Countryside Care Center
Mammoth Hospital
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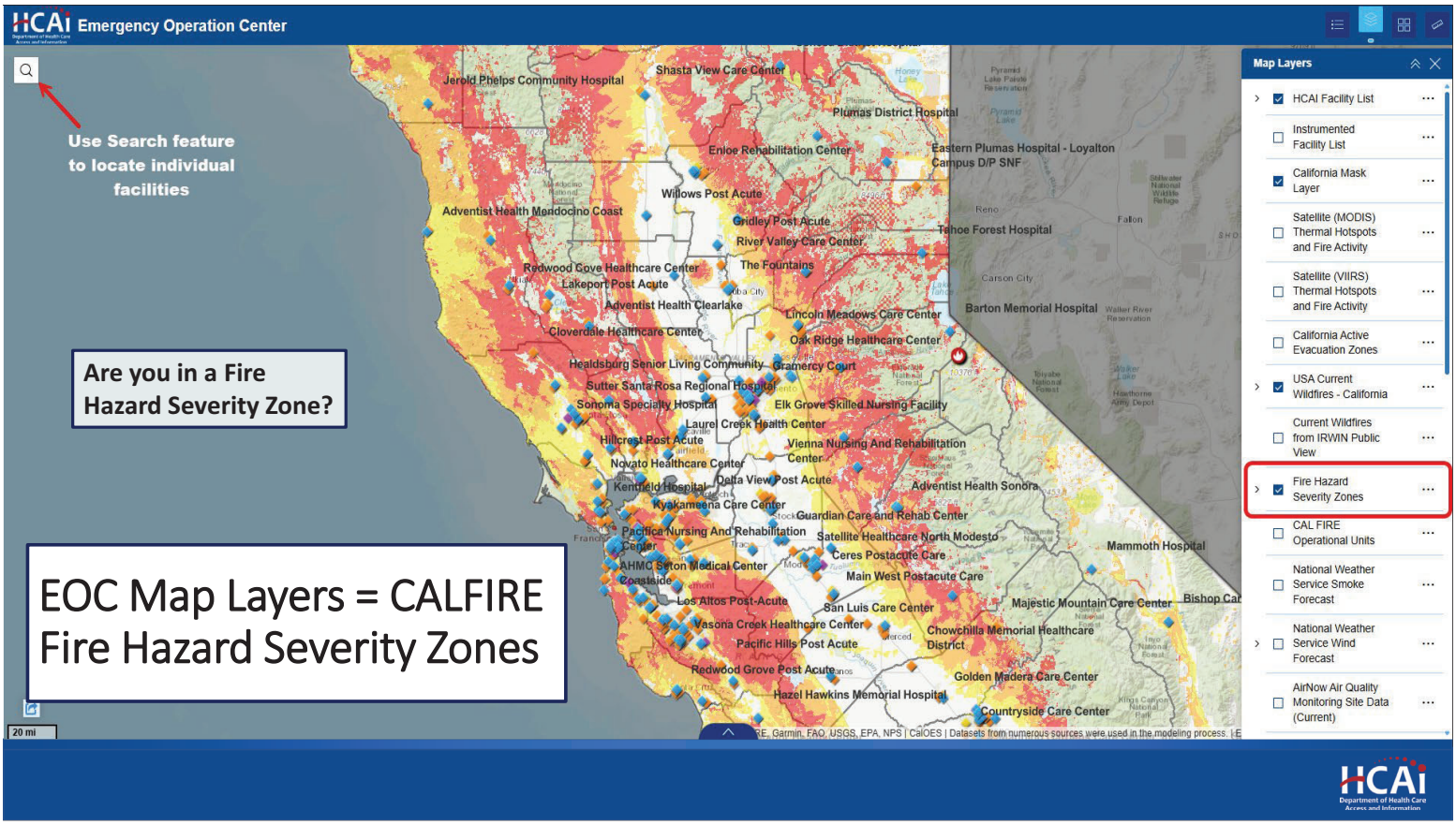
HCAI Emergency Operation Center
Use Search feature to locate individual facilities
Are you in a Fire Hazard Severity Zone?
EOC Map Layers = CALFIRE Fire Hazard Severity Zones
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Hospital Operational Characteristics Amplify Wildfire Vulnerability Beyond Typical Buildings

24/7 Operations with Critical Care Populations

Hospitals operate continuously with vulnerable patients requiring uninterrupted medical support and care

Limited or No Evacuation Capability for Ventilator-Dependent Patients

Many patients cannot be safely evacuated due to dependence on life-support systems and critical medical equipment

Regional Healthcare System Dependency—Failures Cascade

Hospital failures create cascading impacts across the healthcare system, affecting emergency response and patient care across entire regions

Design Failures Have Community-Wide Public Health Consequences

Critical infrastructure vulnerabilities directly endanger public health and safety across entire communities

Wildfire Events Impose Simultaneous Operational Stressors Across All Hospital Systems

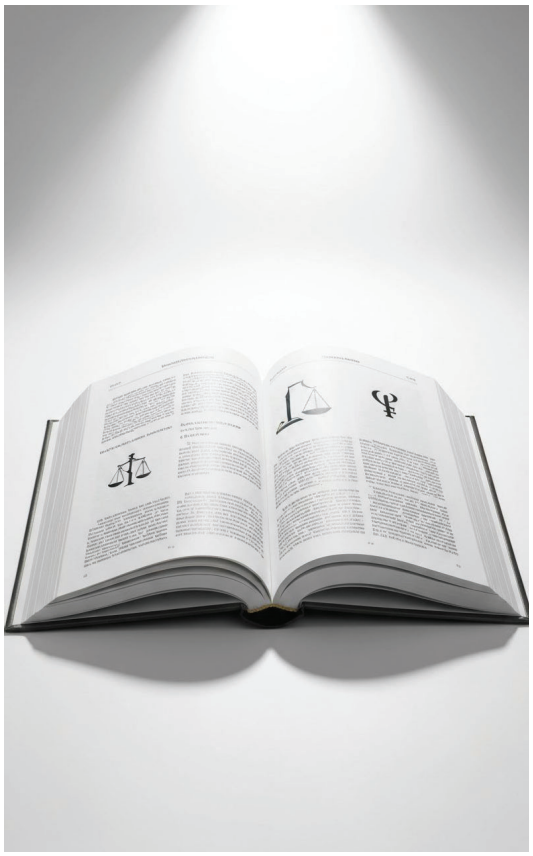
HVAC System Strain
Continuous 100% outside air exclusion and increased filtration load straining mechanical systems beyond design capacity

Smoke Infiltration
Smoke infiltration degrading indoor air quality despite closed dampers, compromising patient and staff safety

Power Disruption
Power disruptions requiring extended generator operation beyond typical design parameters and fuel reserves

Staff Shortages
Staff absences due to evacuation orders and road closures reducing operational capacity during peak demand

Facility Access Limitations
Supply delivery delays and staff commuting challenges due to road closures affecting inventory and staffing levels



Title 24 Part 7 Overview – What Changed?

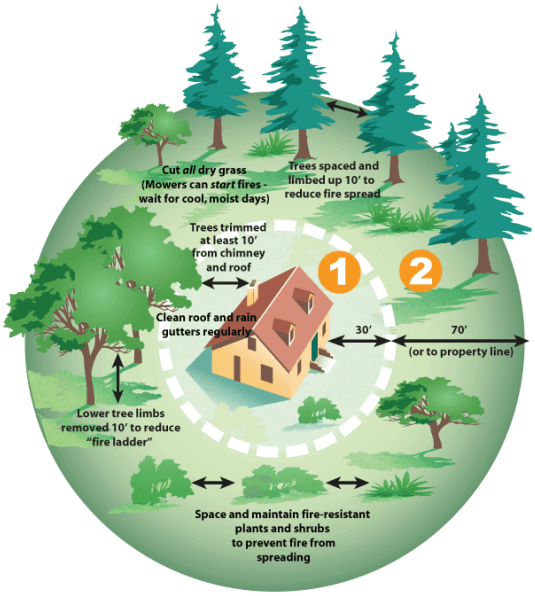
- **Consolidation of Codes:** Integrates previous regulations from CBC 7A, CFC 49,and Title 14 into a single, unified WUI overlay code.
- **One-Stop Reference:** Serves as a comprehensive guide for WUI requirements, previously dispersed across multiple codes.
- Key Components Incorporated:
  - **CCR Title 14:** Minimum Fire Safe Regulations
  - **CFC Ch 49:** Defensible Space, Fire Smart Vegetation
  - **IWUIC Model Code:** Exterior design and construction of buildings, Retrofitting of buildings
- **Local Ordinance Integration:** Includes provisions for local ordinances and a reference matrix for cross-references.
- **Triggering Mechanism:** Emphasizes the role of Fire Hazard Severity Zones (FHSZ) in activating these regulatory requirements.

Application to California Hospitals

- Applies to new buildings in FHSZ/WUI areas
- Hospitals classified as essential facilities (Risk Category IV)
- Higher performance expectations
- Enforcement authority: HCAI / OSHPD 1
- Not retroactive for construction, but defensible space, vegetation requirements may apply

Vegetation Management Compliance

2025 CWUIC §106.4



- Prior to the building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in §603, including PRC §4291 or CA Govt Code §51182
- The enforcing agency can determine the method of documentation
- Local Fire AHJ approval is documented using the HCAI Local AHJ Approval Form

Access & Water Supply Requirements

Fire Apparatus Access Roads
Roads
Mandated for emergency vehicle vehicle maneuverability and response. response.

Approved Water Supply
Must be capable of delivering the delivering the required fire flow for suppression suppression systems.

Emergency Water Storage
May be a requirement, ensuring ensuring water availability during main supply disruptions.

Standby Power
Essential for pumps and water systems to guarantee operation during power outages.

Address and Road Marking
Crucial for clear identification and navigation for emergency services, particularly for existing facilities.

Fire Access and Water Supply Infrastructure Often Designed for Normal Operations, Not Wildfire Conditions

Fire Access Roads

Width, grade, turning radius, and surface requirements must be engineered specifically for wildfire response conditions, not standard traffic assumptions

Required Fire Flow Calculations

Standard calculations must account for multiple simultaneous ignition points across the facility and surrounding areas during extreme wildfire scenarios

Emergency Water Storage

Dedicated storage capacity essential for power outage scenarios when grid-supplied systems become unavailable during extended wildfire events

Backup Power for Fire Pumps

Reliable backup power systems must ensure water delivery continues during grid failure, with sufficient fuel reserves and automated failover mechanisms

Wildfire Exposure Pathways for Hospitals

- Ember Cast

  Embers traveling miles ahead of the flame front can ignite structures and vegetation far from the main fire.

- Radiant Heat Exposure

  Intense heat radiating from the fire can cause structural damage and compromise building integrity without direct flame contact.

- Smoke Infiltration and PM2.5 Accumulation

  Smoke can infiltrate buildings, impacting air quality, posing health risks, and reducing visibility.

- Blocked Road Access

  Wildfires can lead to road closures, hindering emergency services, patient transport, and staff access.

- Electrical Grid Failure

  Overburdened or damaged power infrastructure can lead to power outages, critically impacting essential hospital services.

Ignition-Resistant Construction – Key Areas

High-risk exterior components include:

- Roof assemblies
- Eaves and soffits
- Vents
- Exterior walls and wall coverings
- Glazing and doors
- Decks and projections
- Underfloor areas

Goal: Reduce ember intrusion and direct flame spread

Accessory & Miscellaneous Structures in WUI – Scope and Triggers

2025 CWUIC §504.11

- Structures accessory to a primary building on the same lot
  - Includes both attached and detached structures
  - Applies to structures that require a building permit
  - Common Examples:
    - Trellises / Arbors
    - Patio covers
    - Gazebos
    - Similar open or enclosed structures

Accessory buildings are **non-habitable**, but may still trigger WUI construction requirements depending on classification and enclosure.

Accessory Structures in WUI – What Actually Triggers Requirements

Enclosed accessory structure

- Considered buildings under WUI provisions
- Subject to ignition-resistant construction requirements
- May trigger full compliance depending on use and proximity

Miscellaneous structure

- May not meet definition of enclosed structure
- Often treated differently under WUI provisions
- Still may present fuel and exposure risks to primary structures

Misclassification of accessory structures can result in missed code requirements or inconsistent detailing, particularly in WUI-designated areas.

Miscellaneous & Accessory Structures

- Exceptions:
  - Decks complying with CWUIC §504.7.3
  - Awnings and canopies complying with CBC §3105
- These items are **not excluded**; they are **regulated elsewhere**

2025 CWUI Overview

Roof & Eave Vulnerabilities

- Class A roof coverings required
- Enclosed eaves preferred
- Metal flashing at roof valleys
- Debris accumulation prevention
- Gutter protection to reduce ember ignition

Ventilation Opening Protection Requires ASTM E2886 Compliance and Cross-Discipline Coordination

All Openings Must Comply with ASTM E2886

Ventilation openings require testing per ASTM E2886 standard to ensure adequate protection against ember intrusion and wildfire exposure.

Corrosion-Resistant Mesh with Proper Opening Size

Use mesh materials with 1/16 inch to 1/8-inch opening size to prevent ember penetration while maintaining adequate airflow for ventilation systems.

Use CSFM-Listed Assemblies

All ventilation assemblies must be California State Fire Marshal (CSFM) or U.L. listed to ensure code compliance and documented performance verification.

Common Failure: Specification Mismatch
Architectural specs frequently do not match mechanical equipment submittals. Engineers must verify all HVAC equipment louvers meet Wildland-Urban Interface requirements.

Exterior Walls, Glazing & Doors

- **Ignition Resistance**
  Utilize ignition-resistant or noncombustible exterior materials to prevent ignition from embers and radiant heat.
- **Base Flashing**
  A minimum 6-inch noncombustible base flashing is required where exterior walls meet the foundation to prevent ember intrusion from below.
- **Glazing**
  Employ multilayer tempered glazing or approved fire-rated glazing assemblies to resist heat and prevent breakage.
- **Doors**
  Specify solid-core or fire-rated exterior doors to maintain integrity against fire penetration.
- **Sealing**
  Pay close attention to sealing all gaps at the perimeter and around penetrations to block ember entry.

Smoke Readiness Requires Filtration Upgrades and Indoor Air Quality Monitoring

MERV 13 Minimum Filtration
Upgrade all air handling systems to MERV 13 minimum. HEPA filtration recommended for critical care areas, isolation rooms, and surgical suites to achieve highest particulate removal.

Continuous PM2.5 Monitoring
Deploy real-time indoor PM2.5 monitoring sensors throughout facility. Use continuous data to inform operational decisions during smoke events and optimize filtration system performance.

Clean Air Zones Designation
Designate specific clean air zones where patients can be consolidated during smoke events. Ensure these areas maintain negative or neutral pressure and prioritize their air supply.

Pre-Filter Replacement Strategy
Establish proactive pre-filter replacement protocols to maintain optimal airflow during multi-day smoke events. Stock adequate filter inventory and train staff on replacement procedures.

HVAC Systems Optimized for Infection Control May Underperform During Smoke Events

Reduce Outside Air Intake

Override economizer controls while maintaining code-minimum ventilation to limit smoke-laden outside air entry into the building.

Increase Recirculation

Enhance recirculation where code allows to reduce the proportion of contaminated outside air in the overall ventilation mix.

Evaluate Pressure Relationships

Maintain and monitor pressure differentials throughout the building to prevent smoke migration into critical zones and occupied spaces.

Add Carbon Filtration

Integrate carbon filtration systems where feasible to enhance particulate removal and improve indoor air quality during smoke events.

Critical Insight: Systems designed for biological contamination operate under fundamentally different assumptions than smoke protection. Effective response requires operational flexibility to adapt control strategies as conditions change.

Portable Filtration & Cleaner Air Spaces

- **Portable HEPA Units**

  Utilize portable HEPA filtration units for critical areas to maintain air quality.

- **Designate Clean Air Rooms**

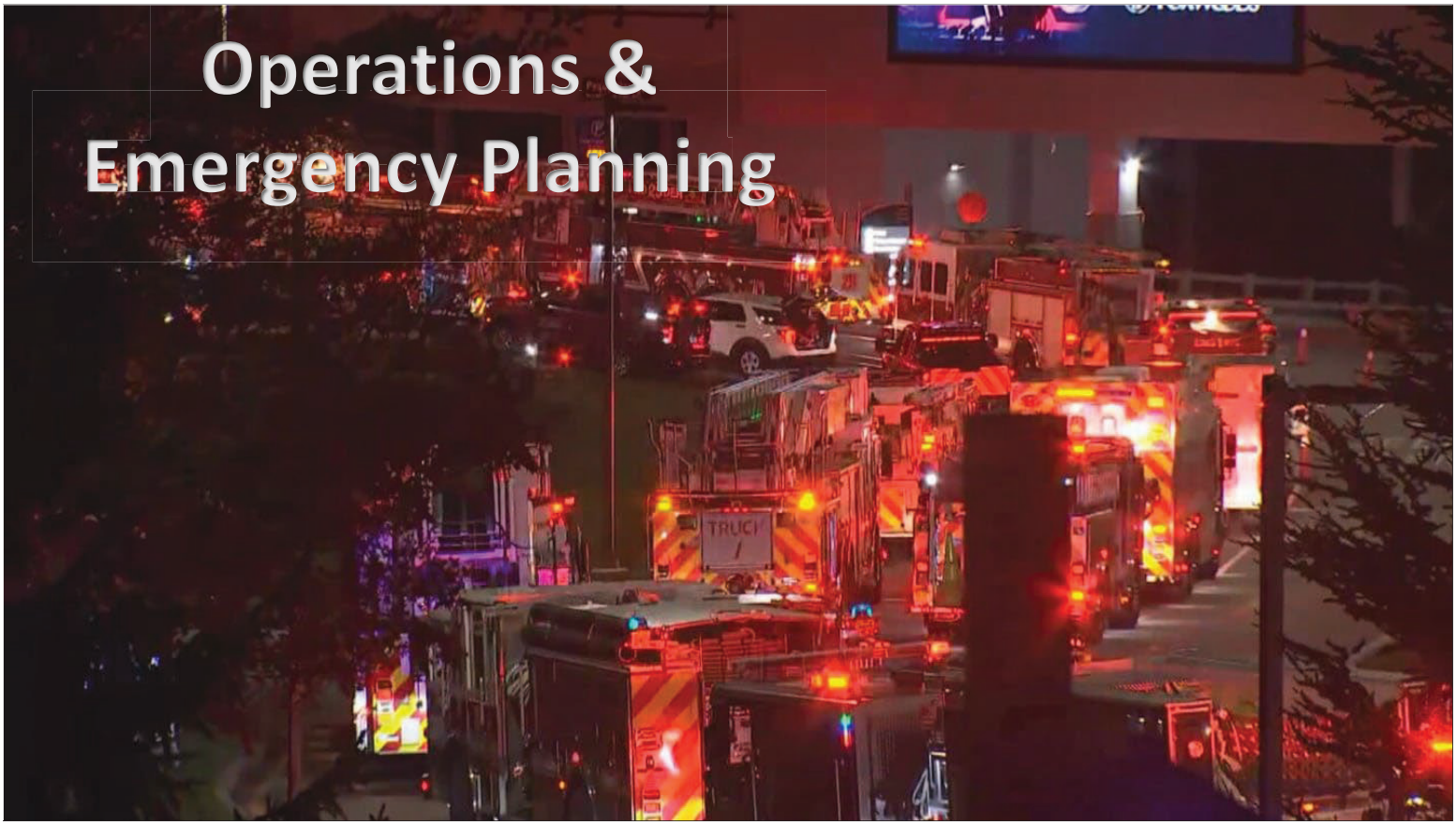
  Establish specific rooms as designated "clean air" spaces.

- **Operational Protocols**

  Develop and implement written protocols for the operation of filtration systems.

- **Redundancy for Critical Areas**

  Consider implementing redundant systems for high-risk areas such as ICU and ED.



Testing Before Wildfire Season

- Test HVAC in smoke-ready mode
  - Verify damper control functionality
  - Confirm filter seating and sealing integrity
  - Evaluate pressure relationships within the system
- Identify failure points before emergency

Smoke Readiness Planning

Ensuring Operational Continuity and Patient Safety

Evaluate HVAC systems for vulnerabilities to smoke and assess capacity for enhanced filtration and air exchange.

Implement higher-efficiency filters (MERV 13 or higher, or HEPA) for critical areas to reduce particulate matter.

Establish real-time time monitoring of of indoor air quality quality (PM2.5) for for informed decision making.

Explore and implement portable air filtration units for high-risk or sensitive areas.

Create a detailed checklist for staff covering HVAC adjustments, monitoring, communication, and safety measures during smoke events.

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Standby Power Systems Face Duration and Load Assumptions That Underestimate Wildfire Events

Generator Runtime Capacity

Generator runtime capacity typically 24–96 hours; wildfire events can disrupt power for 7–14 days.

Fuel Resupply Logistics

Fuel resupply logistics compromised by road closures and regional demand surge, limiting generator runtime extension.

HVAC Electrical Load

Increased HVAC electrical load during smoke events due to continuous fan operation strains backup power capacity.

Load Shedding Conflicts

Load shedding strategies may conflict with patient care requirements, limiting operational flexibility.

Design Gap

Review generator sizing and load prioritization with realistic wildfire duration scenarios.

Surge Capacity Considerations During Wildfire Events

Community Displacement
Evacuations lead to an influx of displaced individuals seeking shelter and medical attention.

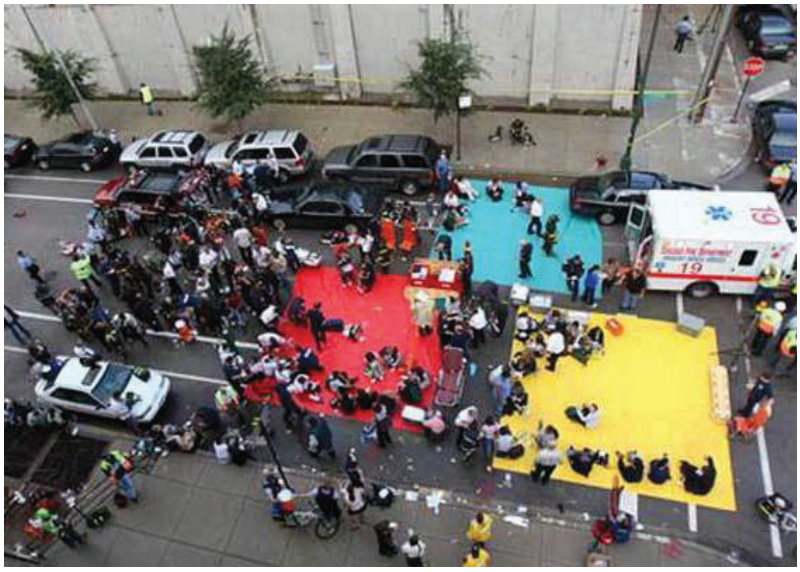
Respiratory Illness Spikes
Poor air quality increases respiratory conditions, requiring urgent care.

Regional Facility Closures
Nearby facilities may close, diverting patients to unaffected hospitals.

Hospitals must proactively plan for increased patient volume and ensure the continuity and protection of their internal operations.

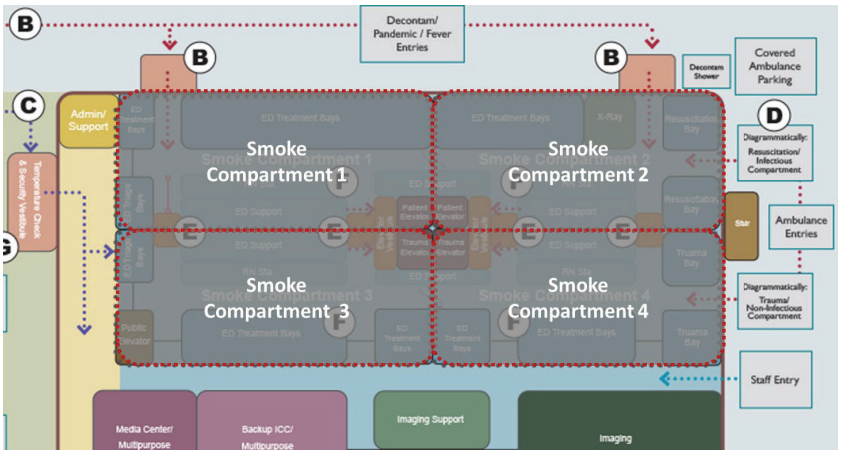
Exterior Triage & Patient Arrival

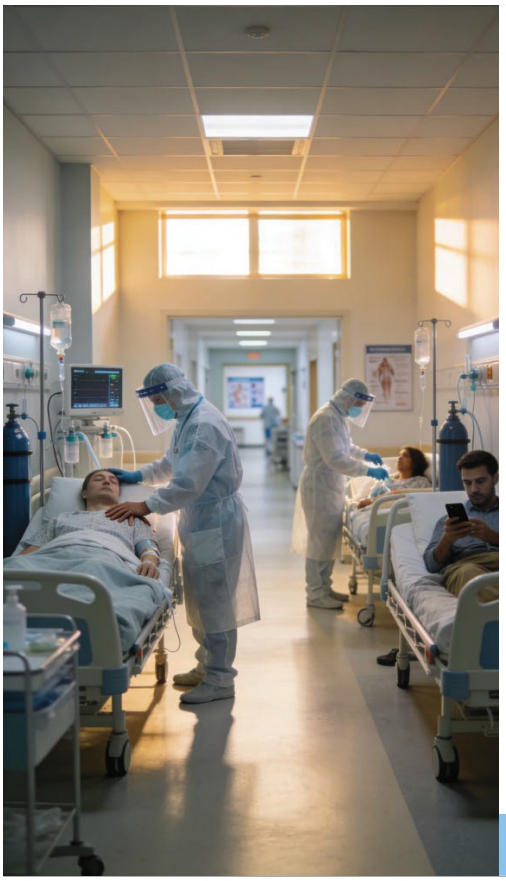
- Separate ambulance and walk-in access
- Exterior screening capability
- Weather-protected triage areas
- Clear signage and traffic flow
- Prevent cross-contamination



Compartmentation Strategy

- Smoke compartments in ED
- Separate infectious and non-infectious zones
- Redundant HVAC per compartment
- Supports relocation without full evacuation





Shelter-in-Place Is the Default Strategy—Evacuation Is Reserved for Structural Threat Scenarios

Decision Factors

Indoor vs outdoor air quality, structural fire risk, power status, road access

Shelter-in-Place Supported By

Envelope integrity, HVAC smoke protection, adequate power, defendable space

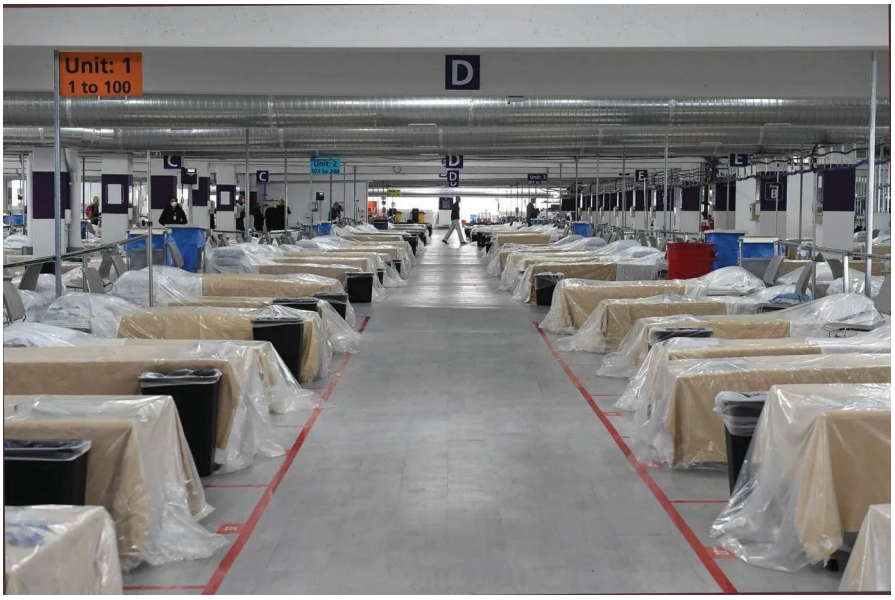
Evacuation Considered Only When

Direct flame threat, complete power loss, loss of water supply, confirmed road access

Key Message

Design must prioritize in-place protection over evacuation reliance. Evacuation of ventilator-dependent patients is medically hazardous.

Alternate Care Sites



- Identify off-site surge locations in advance
- Evaluate utilities and ventilation capacity
- Coordinate with local jurisdictions
- Remote sites are resource-intensive — not first choice

What Can You Do Now? Immediate Next Steps

- **Confirm FHSZ designation**
  Verify the facility's designation within the Fire Hazard Severity Zones.
- **Conduct exterior vulnerability assessment**
  Evaluate the external environment for potential hazards and vulnerabilities.
- **Test HVAC smoke mode**
  Ensure the Heating, Ventilation, and Air Conditioning system's smoke detection and operational mode are functioning correctly.
- **Review generator and fuel capacity**
  Assess the backup generator's capabilities and the available fuel supply.
- **Update Hazard Vulnerability Assessment (HVA)**
  Revise the HVA to incorporate current risks and emerging threats.
- **Align capital projects with WUI requirements**
  Ensure that planned capital investments comply with Wildland-Urban Interface regulations.

Five Essential Actions for Design Professionals to Ensure WUI Compliance and Operational Resilience

1 Confirm WUI Applicability and FHSZ Classification

Determine WUI applicability and FHSZ classification during site selection or programming phase—before schematic design begins.

2 Integrate WUI Requirements into Basis of Design

Integrate WUI requirements into the Basis of Design document and distribute to all consultant team members to ensure alignment.

3 Establish Coordination Protocols

Establish coordination protocols across architectural, structural, MEP, civil, and landscape disciplines to ensure comprehensive WUI integration.

4 Align Design Decisions with Operational Goals

Align design decisions with the owner's operational continuity goals and emergency response capabilities to support resilience objectives.

5 Engage Facility Leadership on Resilience Strategy

Engage facility leadership on resilience strategy beyond minimum code requirements—discuss duration, surge capacity, and system flexibility.

WUI readiness is a team responsibility requiring proactive coordination from project inception.

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