HCAI Department of Health Care Access and Information
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Hospital Building Safety Board
Ad hoc "HCAI Design Guide for Planning and Preparing for Disasters" Webinar Development Subcommittee

January 22, 2026
10:00 a.m., 4:00 p.m.

Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Committee Members Present
Teresa Endres, Chair
Gary Dunger, Vice-Chair
Janice Cheung
Jennifer Cox
Mikhail Fuks
John Griffiths
Kelly Martinez

Consulting Member Present
Abdel Darwich

HCAI Staff Present
Richard Tannahill
Arash Altoontash
Larry Enright
Jamie Schnick
Clara Wu
Michelle Church-Reeves, HCAI Attorney

HBSB Staff
Veronica Yuke, Executive Director
Marcus Palmer
Evett Torres

1. Call to Order and Welcome

Facilitator: Teresa Endres, AIA, ACHA, EDA, AAH; Subcommittee Chair

Teresa Endres formally called the meeting to order on January 22, 2026, at 10:00 a.m. and introduced the session of the Ad hoc "HCAI Design Guide for Planning and Preparing for Disasters" Webinar Development Subcommittee.

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, HCAI; HBSB Executive Director

Veronica Yuke initiated roll call for subcommittee members and HCAI staff. She noted that only four members were present, so the subcommittee did not initially meet the quorum required for voting.

The remaining members confirmed their presence shortly after, and Veronica Yuke confirmed a quorum.

3. Review and approve the draft November 20, 2025, meeting report/minutes

Facilitator: Teresa Endres

Discussion and Input

Teresa Endres provided a comprehensive summary of the November 20, 2025, meeting proceedings, including:

- Confirmation and approval of the September 23, 2025, meeting minutes.
- Review of the HCAI Design Guide published on March 1, 2024, presented at the ASHE PDC Summit by Teresa Endres, Richard Tannahill, and Gary Dunger.
- Clarification by Richard Tannahill that the guide focuses on embedded preparedness in facility design rather than post-disaster response.
- Discussion of flexible design strategies for HVAC and infection control informed by lessons from COVID-19, SARS (2003), and MERS (2012).
- Examination of Canada's building code changes post-SARS and their influence on the current guide.
- Consideration of HVAC adaptations for wildfire smoke infiltration and related filtration recommendations.
- Reference to a video shared by Gary Dunger highlighting nurse preparedness during a seismic event in Turkey.
- Chris Tokas discussed the need for hospitals to remain operational post-disaster and follow-up permitting after emergency adaptations made during COVID-19.
- Discussion on the decision not to use the word "resilience" in the subcommittee title.
- Abdel Darwich emphasized planning for overlapping threats (wildfires, pandemics, earthquakes).
- Review of wildfire-related issues in Title 24, Part 7 by Janice Cheung and Gary Dunger.

- Presentation of ASHRAE Standard 241 and Guide 44 by Abdel Darwich, addressing infectious aerosols and wildfire smoke preparedness.
- Correction on page 7, line 18: the number of outlined topics was confirmed to be seven (not eight).
- Clarification on page 3, line 31: "interface 2025" was corrected to "Wildland Urban Interface" for Title 24, Part 7.
- Breakdown of the seven topic areas:

    1. Power Independence
    2. Wildland Urban Interface, Title 24, Part 7
    3. Wildland Urban Interface, HVAC (ASHRAE 44)
    4. Infection Control, HVAC
    5. Infection Control, Operations
    6. Infection Control, Design
    7. Hazard Vulnerability Assessment

- Discussion of sub-subcommittee ("sub-sub") structure to comply with Bagley-Keene requirements and ensure only two board members meet per sub-sub.
- Communication protocols were emphasized: sub-subcommittee members must coordinate through board staff, not directly with other members.

Further details included:

- Upcoming outlines and presentation timelines for each sub-sub.
- Abdel Darwich initially motioned to approve the minutes from the September 23, 2025, meeting.

Additional information covered:

- Subcommittee leads were assigned for each topic area:
    - Power Independence: David Bliss, John Griffiths, Jamie Schnick
    - Wildland Urban Interface, Title 24, Part 7: Gary Dunger, Janice Cheung
    - Wildland Urban Interface, HVAC: Abdel Darwich, Mikhail Fuks
    - Infection Control, HVAC: Abdel Darwich, Mikhail Fuks
    - Infection Control, Operations: Jennifer Cox, Kelly Martinez
    - Infection Control, Design: Teresa Endres, Kelly Martinez
    - Hazard Vulnerability Assessment: Jennifer Cox, Kelly Martinez
- Coordination for webinars to go through Richard Tannahill and Mia Marvelli to avoid overburdening OSHPD staff.

- Webinars are expected to last 1–1.5 hours, with the Power Independence webinar tentatively scheduled for February 2026.
- Discussion on possibly consolidating some topics from seven webinars to fewer, though no final decision was made.
- Coordination with OSHPD and board emphasized for administrative efficiency.
- A public comment on the Hazard Vulnerability Assessment suggested including historical data, which Jennifer Cox and Kelly Martinez supported.

Subcommittee and Public Comments

- One public comment supported integrating historical data into the Hazard Vulnerability Assessment topic.

Voting

Motion to approve the draft November 20, 2025, meeting report/minutes as amended.

- **Motion:** Abdel Darwich
- **Second:** Janice Cheung
- **Outcome:** Motion passed unanimously.

Informational and Action Items

- Seven topic areas and sub-subcommittee assignments finalized.
- Webinar structure and coordination process confirmed.
- Future agenda item: finalizing the 2026 webinar schedule.

4. Review outline for Topic 1: Power Independence

Facilitators: John Griffiths, PE, Electrical Engineer, CONTECH-CA; David Bliss, MD, Faraday Microgrids; and Jamie Schnick, PE, Senior Electrical Engineer, HCAI

Discussion and Input

John Griffiths introduced the draft outline for the Power Independence webinar and noted that he, David Bliss, and Jamie Schnick had met previously to develop an initial presentation framework. He clarified the outline was a work in progress and welcomed subcommittee input to refine it.

Key topics discussed included:

- Definition of Resilience: John Griffiths proposed defining resilience in the context of enhanced hospital operations beyond the minimum code requirements. He

emphasized continuity of operations and patient care, referencing a sentiment expressed by Chris Tokas: "resilient hospitals support resilient communities."

- Emerging Threats: John Griffiths highlighted internal and external threats to power reliability, including aging infrastructure, deferred maintenance, limited skilled maintenance personnel, and utility instability due to extreme weather and supply chain disruptions.
- Constraints and Solutions: The presentation outlined key constraints to implementing resilient systems, such as space limitations, seismic certification requirements, and cost, alongside potential solutions including distributed energy resources (DERs) and microgrids. He commended HCAI's evolving role in supporting innovative and sustainable power systems.

Mikhail Fuks joined the discussion and contributed two critical constraints:

- A shortage of skilled electrical contractors with experience in emerging technologies.
- Reluctance from some healthcare facility owners to adopt unfamiliar systems due to perceived risk and operational pressure during emergencies.

David Bliss acknowledged the importance of these sociological barriers but noted time limitations for the webinar may constrain how deeply such topics could be covered. John Griffiths suggested deferring extended discussions to other committees such as the Energy Conservation and Management, or the Technology and Research Committees.

Teresa Endres encouraged the facilitators to focus on delivering a well-structured initial webinar using existing content from Jamie Schnick's white papers and national presentations, rather than delaying for perfection.

Jamie Schnick presented key content and clarified technical points:

- Building code aims to protect occupants in place but does not necessarily support continuity of operations.
- Microgrids used for complete facility backup are not required to be seismically certified if they operate outside emergency power systems.
- The presentation will reference the OSHPD Advisory Guide on Microgrids, which evolved from an earlier white paper. The group agreed to include visuals, hotlinks, and QR codes for accessibility.

Additional recommendations included:

- Including fire and life safety perspectives, such as guidance from the State Fire Marshal.

- Noting emergency power systems unique to healthcare settings (e.g., smoke control systems, stair pressurization), as suggested by Gary Dunger.

The presenters agreed to structure the webinar around:

- Site-specific power solutions
- Campus-wide energy mixes
- Code evolution supporting microgrids
- Case studies: Kaiser Ontario, Valley Children's, and Kaiser San Marcos
- Clarification of design constraints and seismic requirements
- A call to action emphasizing technical feasibility, regulatory compliance, and fiscal viability

Jamie Schnick proposed including a matrix to help owners and designers navigate applicable codes for various microgrid configurations.

Teresa Endres concluded by confirming all sub-subcommittees should:

- Use the OSHPD slide template for consistency
- Coordinate with HBSB staff via HBSB support email for accessibility and QR code generation
- Include consistent opening slides using the Design Guide graphic
- Finalize slide decks through internal meetings and submit them for review

Subcommittee and Public Comments

- None.

Informational and Action Items:

- Presentation framework for Power Independence outlined.
- Input incorporated regarding technical, operational, and regulatory considerations.
- Presenters to refine content using OSHPD materials and finalize call to action.
- Slide decks to be standardized and coordinated through HBSB staff.
- Sub-subcommittees to meet independently and submit materials for review.

5. Review outline for Topic 2: Wildland Urban Interface - 2025 Title 24, Part 5

Facilitators: Gary Dunger, Executive Director, Design and Construction, Cedars-Sinai Health System; and Janice Cheung, PE, CSP, Fire Marshal, Redwood City

Discussion and Input

Gary Dunger opened the item by noting that a formal presentation had not yet been developed, as the purpose of this session was to review the outline and gather feedback. He credited Janice Cheung for preparing the content.

The proposed structure for the Wildland Urban Interface webinar includes the following segments:

- Introduction and Context:
    - Welcome and explanation of what the wildland urban interface is and why wildfire resilience is particularly relevant for healthcare facilities.
- Overview of Title 24, Part 7:
    - Introduction to the new WUI-specific requirements under Title 24, Part 7.
    - Discussion of wildfire exposure types and associated hazards for healthcare facilities, such as embers, sparks, fire department access, and the need for evacuation or shelter-in-place strategies.
    - Key fire protection design concepts include ignition-resistant construction, vulnerable exterior features, fire access, water supply, and defensible space.
- Fire Hazard Severity Zones:
    - A five-minute segment explaining what FHSZs are, their importance, and how to determine if a healthcare facility falls within one.
    - Clarification on the limitations of CAL FIRE maps and how they differ from locally defined hazard severity zones.
- Operational Impacts of Wildfire:
    - Analysis of how wildfire events can affect hospital operations and building functionality.
    - Emphasis on the risks of smoke infiltration and water supply disruption, such as experienced during the Palisades Fire.
    - Discussion of logistical and operational requirements for large-scale evacuations, including ambulance resources and fire department accessibility.
- Emergency Planning and Readiness:
    - A 20-minute segment focused on coordinated design and operations planning for wildfire resilience.
    - Topics include managing power outages, HVAC smoke management strategies, and decision-making around evacuation versus shelter-in-place.

- Guidance on assessing current exposure risks, improving facility envelope protection and defensible space, and updating the Hazard Vulnerability Assessment and emergency plans.
- Janice Cheung confirmed the outline aligned with their intentions and added that the webinar was targeted to run for 60 minutes with flexibility to expand sections based on need or subcommittee recommendations. She also raised the question of assigning an OSHPD liaison to assist with content development.

Gary Dunger elaborated that Nanci Timmins, Chief Fire and Life Safety Officer, had already delivered training to OSHPD staff on the WUI topic and may have an existing presentation that could be adapted for the subcommittee's use. He suggested it would be efficient to utilize Nanci's presentation or have her deliver the WUI section during the webinar. He referenced an action item from the previous subcommittee meeting, committing to assigning a staff liaison.

Veronica Yuke confirmed she would follow up with Chris Tokas to clarify the staff assignment before the next meeting.

Teresa Endres acknowledged her previous mistake in referencing Part 5 instead of Part 7 and confirmed the correction. She then called for closing comments.

Subcommittee and Public Comments

- None.

Informational and Action Items

- Review outline for WUI, Title 24, Part 7 confirmed.
- Potential use of existing OSHPD WUI training materials and liaison support discussed.
- Coordination with HBSB staff and possible presentation involvement from Nanci Timmins suggested.
- Follow-up needed from OSHPD leadership to confirm support staff assignment.

6. Review outline for Topic 3: Wildland Urban Interface - HVAC (including ASHRAE Guideline 44)

Facilitators: Abdel Darwich, PE, LEED AP, HFDP, Principal, Guttmann and Blaevoet Consulting Engineers; and Mikhail Fuks, PE, HFDP, DBIA

Discussion and Input:

Abdel Darwich opened the session by clarifying that this presentation focuses specifically on mitigating smoke infiltration from wildfires, which differs from the fire-related risks discussed in Topic 2. The session will align with Section 7 of the HCAI

Design Guide and expand upon it using newer content from ASHRAE Guideline 44, which was published after the Design Guide.

The facilitators plan for a 45–60-minute webinar, subject to subcommittee input and potential integration with related topics. The content is structured around four main conceptual strategies to manage wildfire smoke intrusion:

- Awareness:
    - Overview of wildfire smoke, its impact, and how it differs from general pollution.
    - Introduction to monitoring tools such as sensors covered in both the Design Guide and ASHRAE Guideline 44.
- Planning:
    - Development of a Smoke Readiness Plan, supported by templates, questions, and survey tools.
    - Focus on operational governance and preparedness.
- Prevention of Smoke Intrusion:
    - Identification of entry points: air intakes, doors, envelopes, leakage paths, and even contaminated clothing.
    - Techniques to minimize intrusion using both prescriptive (e.g., default MERV 13 filter use) and performance-based strategies (e.g., advanced calculation methods available in ASHRAE Guideline 44).
- Mitigation of Infiltrated Smoke:
    - Use of particle and gas filtration, with details from both the Design Guide and ASHRAE resources.
    - Discussion of portable air cleaners and their application in healthcare.
    - Consideration of non-HVAC filters, such as those in incubators and medication delivery systems that may be impacted by smoke particles.

A key feature of the presentation is a comprehensive mitigation measures matrix developed in ASHRAE Guideline 44. This table evaluates the difficulty of implementing 13–14 mitigation strategies across seven – eight common HVAC system types. While too detailed to present in full, it will be referenced as a critical resource for healthcare facility owners and decision-makers.

Additional points of discussion will include:

- A dedicated page from ASHRAE Guideline 44 focusing on healthcare-specific precautions.

- Review of challenges encountered during simultaneous wildfire and pandemic events, such as the 2020 overlap, where ventilation strategies conflicted (e.g., increase outdoor air for infection control vs. reduce outdoor air to limit smoke infiltration).
- An overview of emerging research, including lab simulations of wildfire smoke interactions with air filters and microscopic analyses of filter behavior.

Teresa Endres recommended that the presentation begin by clearly stating that ASHRAE Guideline 44 was developed *after* the HCAI Design Guide was published, highlighting the evolution of understanding in wildfire smoke mitigation. Abdel Darwich confirmed that this context is already included in the introductory slides.

Subcommittee and Public Comments

- None.

Informational and Action Items

- Topic outline reviewed and affirmed.
- Presentation will integrate the HCAI Design Guide with ASHRAE Guideline 44.
- Matrix of mitigation strategies and healthcare-specific filter considerations to be highlighted.
- Presentation will reference evolving research and address future directions in wildfire smoke filtration.
- Clarification included that ASHRAE Guideline 44 post-dates the Design Guide.

7. Review outline for Topic 4: Infection Control - HVAC

Facilitators: Abdel Darwich and Mikhail Fuks

Discussion and Input

Abdel Darwich introduced the outline for the Infection Control, HVAC webinar, noting that he and Mikhail Fuks developed the content in parallel with the wildfire smoke topic.

- Section 1: Background and Framework
    - Based on Section 3 of the HCAI Design Guide.
    - Overview of administrative, environmental, and personal protective measures. HVAC is framed as an environmental control strategy.
    - Emphasis on lessons learned from the COVID-19 pandemic.
- Section 2: Design Guide Recommendations
    - Review of guidance on increasing outside air, use of UV technologies, and backup systems.

- Focus on resilient system design that anticipates changes in infection control needs.

- Section 3: Filtration
  - Discussion on use of HVAC filters for infection control.
  - Reinforcement of guidance in the Design Guide regarding filter types and performance.
- Section 4: Return and Exhaust Air
  - Review of Design Guide Section 3.3 recommendations, including:
    - Negative pressure rooms
    - Switchable airflow configurations
    - Guidance on avoiding negative air pressure in operating rooms
- Section 5: Augmentation with ASHRAE Standard 241
  - Abdel Darwich emphasized that ASHRAE 241 was developed after the Design Guide and introduces new concepts such as:
    - Clean Airflow vs. Volume
    - Risk modeling and clean air delivery rate (CADR)
    - Infection Management Mode (IMM)
    - Healthcare-specific clean air requirements
  - Facilitators plan to provide high-level guidance only, without deep technical detail. They will also highlight ASHRAE's free online access to the standard and its Excel-based calculation tool.
  - A practical example will be presented using an ED waiting room, one of the highest-risk areas for airborne infection transmission, to demonstrate real-world design decisions using the ASHRAE 241 calculator.
- Supplemental Content and Emerging Data:
  - Abdel Darwich referenced a PNNL study comparing energy consumption across infection control strategies in various climates.
  - Findings showed that 100% outside air, while often recommended, is among the most energy-intensive solutions. Other options can provide compliance with less energy use.
  - Discussion arose about legacy recommendations in the original Design Guide, including schematics for HVAC "workarounds" that may now be obsolete due to updated understanding and ASHRAE 241.

Mikhail Fuks advised against presenting outdated recommendations that could create confusion in the field. He emphasized the importance of clarifying to the audience when

information has evolved. He recommended working with the Building Standards Unit to formally revise outdated guidance.

Richard Tannahill agreed, stating the subcommittee should inform BSU of necessary updates. He supported integrating new data into the webinar and flagged that recirculated HEPA-filtered air is still being used and accepted in certain applications.

Teresa Endres noted that the guide was always intended to evolve as new information emerges. She encouraged Abdel Darwich and Mikhail Fuks to present updated concepts and use the webinar as an opportunity to preview changes that may appear in future guide revisions.

Abdel Darwich confirmed that ASHRAE 241 enables quantification, moving beyond the qualitative recommendations of the Design Guide. He expressed interest in showing examples using different types of spaces and airflows, time permitting.

Larry Enright added that some hospital spaces, such as exam rooms, have lower air change requirements under code and may benefit most from guidance in ASHRAE 241. He highlighted the importance of discussing recirculating units and their impact on air quality and energy efficiency.

Teresa Endres proposed combining the HVAC and design webinars for infection control to encourage cross-disciplinary understanding. She noted the overlap between mechanical systems and medical planning and emphasized the benefit of co-presenting these concepts to audiences with different professional backgrounds.

Subcommittee and Public Comments

- None.

Informational and Action Items

- Presentation will integrate ASHRAE 241 and clarify it post-dates the Design Guide.
- Webinar will deliver high-level takeaways for owners, planners, and engineers.
- Obsolete recommendations from the Design Guide will be flagged for BSU review.
- Real-world examples and modeling tools will be included (e.g., ED waiting room).
- Webinar may be combined with infection control, and design topic for cross-functional engagement.
- Subcommittee encouraged to submit updated data to BSU for potential guide revisions.

8. Review outline for Topic 5: Infection Control - Operations

Facilitators: Jennifer Cox, MHA, BSN, RN, PHN, CIC, System Director, Epidemiology and Infection Prevention, University of California Irvine Health; and Kelly Martinez, RN, MBA, FACHE, EDAC, Co-founder, Hallsta, Inc.

Discussion and Input

Kelly Martinez presented the Infection Control, Operations outline, developed in collaboration with Jennifer Cox. She noted significant content overlap with the HVAC and design sections, suggesting that these topics may ultimately be merged into a single webinar to create a comprehensive infection control strategy.

The presentation outline includes the following key segments:

- Outbreak Alert Systems:
    - Introduction to the DORSCON (Disease Outbreak Response System Condition) model from Singapore, which categorizes public risk and impacts based on infectious disease threats.
- Foundational Principles:
    - Emphasis on an all-hazards approach, surge readiness, system flexibility, and redundancy.
    - Importance of integrating infection prevention and hospital epidemiology early in the design process.
    - Operational infection control risk assessments (ICRAs) for ongoing maintenance and construction.
- Regulatory and Guideline Frameworks:
    - Review of applicable codes and standards, with a suggestion to develop a matrix for clearer visual reference.
- Built Environment Considerations:
    - Airflow, pressurization, and ventilation strategies.
    - Convertible room and ward-level isolation (e.g., Med/Surg units transformed into negative pressure areas).
    - Compatibility of materials and finishes with enhanced cleaning protocols.
    - HCAI-compliant, durable, and disinfectant-resistant product selection.
- Infrastructure for Surge Events:
    - Hand hygiene: strategic placement of sinks, hand sanitizers, and planning for water outages.
    - Integration of environmental services workflows, including waste management and clean/soiled separation.

    - Standardized room design for future adaptability (e.g., donning/doffing zones, lobby-to-triage conversions).
    - Traffic flow flexibility and control (e.g., badge access, directional movement).
- Morgue and Surge Capacity Planning:
    - Infrastructure support for temporary morgue capacity (e.g., electrical pads for refrigerated trailers).
    - Flexible ventilation modes and real-time environmental monitoring integrated with BMS.
- Water Systems and Preparedness:
    - Management of low-use zones and Legionella prevention.
    - Plumbing design to minimize dead legs and stagnation.
    - Sensor integration, emergency disinfection (e.g., hyperchlorination), and recovery protocols for main breaks or contamination events.
- Clinical Operations During Outbreaks:
    - Patient segregation, dedicated flows for infected vs. non-infected populations.
    - PPE storage, surge planning, reusable PPE considerations, visitor screening protocols.
    - Use of exterior spaces (e.g., tents, trailers) for triage and surge capacity.
- Sterile Processing:
    - Scaling of sterilization capacity in the absence of flash sterilizers.
    - Redundant systems and consideration of centralized vs. decentralized processing workflows.
- Hazardous Waste Management:
    - Planning for temporary biohazard waste storage and decontamination staging areas.
- Digital Infrastructure and Monitoring:
    - Environmental dashboards for real-time monitoring of airflow, pressure, and water quality.
    - Support for rapid room mode switching during emergencies.
- Facilities Management Integration:

    - Preparedness-focused documentation (e.g., airflow schematics, shutoff locations).
    - Cross-training, remote inspection access, and coordination during emergency events.
- Commissioning, Recommissioning, and Validation:
    - Infection prevention's role in reoccupancy procedures.
    - Scenario-based drills for surges, system failures, and construction turnover planning.
    - Ensuring negative pressure zones and water systems are operational post-renovation.
- Governance and Decision-Making:
    - Infection prevention's formal involvement across all design and operational phases.
    - Escalation pathways for safety-impacting design decisions.

Teresa Endres praised the depth of the outline and confirmed the extensive overlap between the operations, HVAC, and design topics. She proposed merging them into one comprehensive webinar, while allowing each sub-subcommittee to continue developing their individual materials in coordination.

Mikhail Fuks inquired about whether multiple board members could collaborate on a shared slide deck. Michelle Church-Reeves clarified that such collaboration would constitute a serial communication under the Bagley-Keene Open Meeting Act and is not permitted. Instead, board members must submit materials through the HBSB staff, and all discussion must occur in a public meeting.

Teresa Endres recommended that each sub-subcommittee continue independently and coordinate indirectly through overlapping members. Kelly Martinez, who is involved in both the operations and design sub-subs, agreed to facilitate coordination between groups.

Teresa Endres also offered to share a more detailed DORSCON model slide used in a prior PDC presentation and suggested coordinating with Kelly Martinez on the depth of content to include in the merged webinar.

Subcommittee and Public Comments

- None.

Informational and Action Items

- Outline reviewed and affirmed for Infection Control, Operations.

- Significant overlap identified with HVAC and Design, potential for webinar consolidation.
- Slide development to continue in parallel by each sub-committee.
- Materials to be routed through HBSB staff in compliance with Bagley-Keene requirements.
- Existing morgue and exterior triage infrastructure needs flagged for integration in surge planning.
- Detailed infection prevention involvement from planning through re-occupancy emphasized.

9. Review outline for Topic 6: Infection Control - Design
Facilitators: Teresa Endres and Kelly Martinez

Discussion and Input

Teresa Endres led the presentation on the Infection Control, Design topic. She began by thanking the board staff for their quick work in processing the outline submission.

Teresa Endres explained that much of the material presented was previously shared at the ASHE PDC Conference, focusing on chapters 4 and 5 of the Design Guide. She emphasized the repeated theme of designing beyond code minimum, which will be reinforced in the intro and conclusion of the webinar, to be coordinated with OSHPD staff. That phrase is intentionally repeated throughout the presentation to highlight the elevated level of preparedness recommended.

Key design features outlined include:

- Entry-Level Diagram Review:
    - Diagrams display temperature and security checkpoints (e.g., as vestibules),
    - Separate entry points for pandemic patients, trauma, and resuscitation.
    - Layout supports isolation and compartmentalization, both for pandemic and non-pandemic areas.
- Emergency Department Diagrams:
    - Aligned with mechanical examples to illustrate segregated waiting rooms.
    - Diagrammed options show four patient compartments (two for pandemic, two for non-pandemic).
    - Discussion of redundant HVAC systems, modeled on practices from Canada and Singapore.

- Clean and Soiled Flows:
    - Separate clean/soiled elevators and trauma elevators.
    - Design strategies that reduce cross-contamination by placing resuscitation and imaging (x-ray) in proximity within the same zone to reduce patient movement.
- Pandemic-Ready Patient Units:
    - Description of clean and soiled entry/exit paths featuring double-door alcoves with donning/doffing facilities (handwashing, PPE stations, waste receptacles).
    - Design permits materials to be passed into units without contact, mimicking anteroom functions.
    - Includes multipurpose room strategies as adaptable infection control solutions.
- Patient Room Design Concepts:
    - Rooms are airborne infection isolation rooms equipped with anteroom vestibules.
    - Diagrams in the guide include inboard, outboard, and midboard toilet configurations to show non-biased options depending on structural feasibility.
    - Specific language used to describe rooms as acuity adjustable rather than acuity adaptable, in alignment with CDPH definitions.

Teresa Endres concluded that much of the content in this design section overlaps with the HVAC and operations sections already reviewed. She proposed merging these three topics, HVAC, operations, and design, into one consolidated webinar. This approach will allow for cross-disciplinary education between designers, engineers, and owners.

Teresa Endres further commented on the need to educate owner's representatives, especially those from non-healthcare construction backgrounds (e.g., corporate interiors, schools), who may focus solely on first cost and not grasp the operational implications of infection control–driven design. She stressed this as an opportunity to bridge the knowledge gap and promote more informed design discussions.

Kelly Martinez agreed with the assessment, highlighting the redundancy and alignment among the three topics.

Subcommittee and Public Comments

- None.

Informational and Action Items:

- Outline reviewed and affirmed for Infection Control, Design.
- Key design recommendations include separate flows, HVAC redundancy, pandemic-ready patient rooms, and anteroom integration.
- Extensive overlap identified with HVAC and Operations topics (Items 7 & 8; Topics 4 & 5), with proposal to consolidate into a single webinar.
- OSHPD staff to assist in preparing boilerplate introduction and conclusion for webinars to emphasize “beyond code minimum.”
- Kelly Martinez to coordinate cross-topic alignment and content integration.
- Opportunity identified to educate owner's reps unfamiliar with healthcare operational requirements.

10. Review outline for Topic 7: Hazard Vulnerability Assessment

Facilitators: Jennifer Cox and Kelly Martinez

Discussion and Input

Kelly Martinez introduced the topic by emphasizing that a Hazard Vulnerability Assessment (HVA) should frame hospital design either at the very beginning or end of the webinar series. She described the HVA as a systematic method for identifying, evaluating, and prioritizing risks to support strategic preparedness and building resilience. She noted that risk assumptions can be misleading if actual mitigation efforts are not considered.

Kelly Martinez described the HVA as a Title 22 and Joint Commission requirement and explained how hospitals score hazards across natural, technological, human, and hazardous materials categories. Each hazard is assessed by its probability, human impact, property damage, business impact, mitigation preparedness, and response capacity, leading to a weighted risk score.

She walked through an Excel-based tool and sample matrix, explaining how risks such as earthquakes could be scored high due to poor mitigation (e.g., outdated infrastructure). After identifying the top risks, facilities can plan their mitigation, preparedness, response, and recovery strategies.

Kelly Martinez emphasized that findings from HVAs should influence capital investment, infrastructure renewal, policies, and master planning. She reiterated that risk levels vary per hospital depending on location and infrastructure.

Teresa Endres suggested incorporating real design examples that show how HVA findings translated into final facility design outcomes, to make the material more relatable to designers and engineers.

Jennifer Cox supported the idea and agreed that tying HVA results to mitigation design outcomes would be user-friendly.

Subcommittee and Public Comments

- Teresa Endres praised the clarity of the presentation and emphasized how helpful it would be for designers to understand where HVAs originate and how they inform design.
- Jennifer Cox affirmed the benefit of aligning hazard identification with the resulting design implications.

Informational and Action Items:

- The subcommittee discussed possibly placing this topic at the beginning or end of the webinar series.
- The facilitators will consider integrating design examples that illustrate how identified hazards were mitigated through architectural and engineering decisions.

11. Discuss schedule for the series of HCAI Design Guide for Planning and Preparing for Disasters webinars in 2026

Facilitator: Teresa Endres (or designee)

Discussion and Input

Teresa Endres opened the item by discussing the scheduling of the 2026 webinars for the HCAI Design Guide series. She initially referenced Topic 1: Power Independence, noting that more preparation was needed and confirming with Jamie Schnick and David Bliss that slide submissions could be completed by February 27, 2026. Jamie Schnick confirmed that timeline, and Teresa stated that board staff would follow up by email with the presenters.

Teresa Endres then asked Abdel Darwich and Mikhail Fuks whether they could complete their slide decks by the end of February. Abdel Darwich responded that he had already presented on wildland smoke and could complete that section by the deadline; however, the section on wildfire would take more time.

Teresa Endres followed up with Gary Dunger and Janice Cheung regarding Title 24 Part 7 content. She asked if slides could be finalized by the end of February and Gary Dunger agreed.
Janice Cheung inquired about the status of slides previously prepared by Nanci Timmins to avoid duplication. Richard Tannahill stated that he would follow up with Chris Tokas on that matter the same day.

For Topic 5: Infection Control, Operations, Teresa Endres asked Kelly Martinez and Jennifer Cox to estimate a completion timeline. Kelly Martinez explained that because

topics 4, 5, and 6 were being merged, significant coordination would be required between her, Jennifer Cox, and Teresa Endres. She suggested initially submitting individual sections. Teresa Endres proposed that she and Kelly Martinez work together more closely to finalize slides, especially since design-related slides were mostly prepared from the prior PDC conference rollout. Jennifer Cox agreed to the coordination plan.

Regarding Topic 7: Hazard Vulnerability Assessment, Teresa Endres noted it might take more time to complete. She asked Kelly Martinez and Jennifer Cox to begin structuring slides around the Excel tool presented earlier and suggested that board members could assist by providing relevant images. Kelly Martinez acknowledged and agreed to begin outlining the content.

Teresa Endres proposed reviewing slide decks for Topics 1, 2, and 3 at the next subcommittee meeting, targeting those as the earliest webinars to be scheduled. Topics 4–7 would be scheduled after slide decks were completed and reviewed in subsequent meetings.

Kelly Martinez asked whether there would be a standard PowerPoint template to maintain uniformity. Teresa confirmed there would be a consistent slide deck template using the HCAI/OSHPD design, with the title slide from the previous PDC presentation. She stated the template would be sent to Marcus Palmer to distribute within a few days.

The subcommittee then selected a date for the next meeting. After reviewing calendars, the group agreed to reconvene on March 11, 2026, to allow time to review completed slides before the full board meeting in April.

Subcommittee and Public Comments

- Kelly Martinez highlighted the complexity of coordinating content across merged topics and affirmed her willingness to work with both Teresa Endres and Jennifer Cox.
- Janice Cheung raised an important consideration regarding pre-existing slide content from Nanci Timmins to avoid rework.

Informational and Action Items

- All facilitators are to complete and submit their respective slide decks by February 27, 2026.
- Board staff will send out follow-up emails to facilitators to confirm deadlines.
- Topics 1–3 slide decks will be reviewed at the March 11, 2026, subcommittee meeting.
- A uniform PowerPoint template will be distributed to all presenters.
- The next subcommittee meeting is scheduled for March 11, 2026.

12. Comments from the Public/Subcommittee Members on Issues not on this Agenda

Facilitator: Teresa Endres

Discussion and Input

Teresa Endres formally opened Agenda Item 12 by inviting comments from both the public and subcommittee members on topics not listed on the current agenda. She asked whether there were any additional questions or issues unrelated to the specific agenda items previously discussed.

Veronica Yuke clarified the scope of this item, emphasizing that the invitation was for issues not already covered in the current meeting agenda, in alignment with standard public meeting procedures.

Subcommittee and Public Comments

- None.

Informational and Action Items

- None.

13. Adjournment

Teresa Endres adjourned the Ad Hoc HCAI Design Guide for Planning and Preparing for Disasters Webinar Development Subcommittee meeting at 12:37 p.m.