

***Healthcare Interpretations Task Force***  
***DRAFT MINUTES***  
 Conference Call  
 March 30, 2020  
 12:30 P.M. to 2:30 P.M.

1. The meeting was called to Order at 12:30 P.M. by Robert Solomon.
2. Introduction of Members and Guests. The introduction of members and guests was completed. Those in attendance included:

<b>MEMBER</b>	<b>REPRESENTING</b>
Chad Beebe	ASHE/AHA
Ken Bush	Maryland State Fire Marshal's office — representing International Fire Marshals Association (IFMA)
Michael Crowley	JENSEN HUGHES – Rep. Health Care Facilities Correlating Committee
David P. Klein*	US Department of Veterans Affairs
William Koffel	Koffel Associates, Inc. – Rep. TC on Health Care Occupancies
Herman McKenzie*	The Joint Commission – SIG
James Merrill II*	US Department of Health & Human Services (CMS)
James Peterkin	TLC Engineering-Rep. NFPA Health Care Section
Ajay Prasad	JENSEN HUGHES – Rep. American Health Care Association
G. Brian Prediger*	US Army Corps of Engineers
Kelly Proctor*	Det Norske Veritas Healthcare (DNV GL)
Robert Solomon	NFPA
Samuel Vega-Cotto	Indian Health Service (IHS)
John Williams* (ALT to C. Schlegel)	Washington State Department of Health State Health Care Agency (SHA)
<b>ALTERNATE MEMBER</b>	<b>REPRESENTING</b>
Joseph Bermes	Indian Health Service (IHS)
Greg Harrington (ALT to R. Solomon)	NFPA
David Hood	JENSEN HUGHES – Rep. American Health Care Association
Peter A. Larrimer* (ALT to D. Klein)	US Department of Veterans Affairs

Justin Schwartz* (ALT to B. Prediger)	US Army Corps of Engineers
Brennan Scott* (ALT to K. Proctor)	Det Norske Veritas Healthcare (DNV GL)

\*AHJ Member

## GUESTS

NAME	REPRESENTING
Bruce Abell	US Army Corps of Engineers
Jim Hogenson	US Army Corps of Engineers

**3. Agenda** As noted when the meeting notice was originally sent out, the purpose of the conference call was to give the major organizations who are being directly impacted by the COVID-19 challenge the opportunity to share information and potential solutions moving forward. The meeting was structured to hear about issues, where other information could be found, and listen to ideas from the other HITF members with regard to devising innovative concepts and solutions.

## 4. Organization Update. Challenge/Solution/Resource

**a. USACE- Brian Prediger** The efforts coming from USACE are being done under the direction of FEMA. At present, 160 sites throughout the US are under consideration with regard to developing alternate care sites (ACS). These locations include everything from conversion projects for convention centers and arenas, hotels and motels, and dormitories. A series of centralized layout models along with criteria (performance work statements) have been developed and have been consolidated on their [ACS Webpage](#). The criteria has been placed into a playbook (“The Binder”) that is then utilized by the individual USACE Districts across the country. Each district is responsible for working with state and local authorities along with FEMA to identify appropriate sites and conducting evaluations. Members of the Defense Health Agency are also a key partner in this endeavor. Utilizing buildings and structures with complete automatic sprinkler system protection and fire alarm system protection remain a key element that should be present when existing host buildings are being considered. In other cases, use of tents or membrane structures in large open freestanding areas, or as part of a conversion project are among the challenges being faced. USACE is compiling a list of off-the-shelf products and systems/structures that include not only the construction elements noted above, but also how the use of stick built or modular units might also be feasible. Part of the goal is to allow the contractors to come up with innovative ideas and to apply those ideas as more facilities get into the design phase.

**b. CMS-Jim Merrill** After declaration of the public health emergency by HHS and initiation of the Stafford Act, CMS has specific processes and procedures in place to gain

additional flexibility with regard to numerous program elements. These provisions fall under Section 1135 of the Social Security Act and are generally referred to as the 1135 Waivers. It allows the agency to modify elements within the Medicare/Medicaid program criteria while at the same time protecting providers from being sanctioned for not strictly following all of the program elements. For life safety code related items, certain relief is provided with regard to the Condition of Participation issues. 1135 Waivers are normally used for natural disasters such as hurricanes or tornadoes and are issued in 60 day increments. Once the 60 days has expired, the agency does have the ability to add additional 60 day increments as necessary until the situation is stabilized or passed. Special requirements or modifications that either a provider or a state health care agency may be asking for are typically handled through the CMS regional office who will then forward the information to Baltimore. In order to improve efficiency, it is recommended that any such issues be sent directly to Jim or Marty with respect to a question or request for relief that the healthcare provider or state health care agency may be seeking. You can find the [CMS COVID-19 information here](#).

**c. Veterans Affairs-David Klein/Pete Larimer** VA is starting to see shortages that are impacting both available facility space for treatment as well as staffing shortages. Patient rooms are being converted into negative pressure environments using an anteroom/vestibule that is temporarily constructed in the corridor thus cutting down on available corridor width. In other circumstances, facility configurations are being modified to create negative pressure environments for entire wings of the hospital. In both cases, this requires a review of the impact on the overall HVAC system to ensure that other parts of the facility are able to maintain the necessary temperature and ventilation rates. General direction instructions have been provided to facilities to curtail activities on certain safety-related elements such as inspection, testing and maintenance, drills, and other elements normally required by adopted or referenced codes. The direction normally comes in the form of a statement such as “Monthly inspection of \_\_\_\_\_ can be set aside for (specified time period) or until the emergency passes.” For facilities that may need to maintain some inspection or oversight, the size of the inspection teams has been reduced to absolute minimums. Inspections are continuing in facilities or portions of facilities that treat psychiatric patients — primarily due to the ongoing potential threat for suicides. These areas should have substantially lower chances for COVID-19 patients being present due to the restricted access of such spaces and areas. Temporary structures (tents) are being constructed outside some facilities to assist with the drive up/drive-through testing sites that are being established. Some VA pharmacies are preparing their own hand sanitizer that includes handling and mixing of isopropyl alcohol – a class 1B liquid. Facilities have also incorporated larger capacity trash receptacles that exceed Life Safety Code limits (32 gallons) due to the amount and volume of PPE that has to be disposed of on a regular basis. This process allows fewer trips to remove and empty the containers thus limiting exposure of some staff members. A related item concerning ITM of certain systems and features is that the established contract companies and providers are refusing or reluctant to send their staff into the health care environment under the current circumstances. Part of the management of all of these challenges is requiring individual facilities to initiate ILSMs and procedures, and document what is not being managed or adhere to in strict compliance with the usual requirements.

**d. SHA-Washington State-John Williams** As noted by the VA, construction of the vestibule/anteroom in the corridor in order to provide negative pressure patient room space is being done in multiple circumstances and facilities. Additional equipment in corridors is also more common. Converting entire wings of a facility into a negative pressure environment seems to be an attractive option that should be explored and possibly expanded. ITM and other types of external vendors and contractors are not willing to come into facilities thus adjustments have to be made by facility staff to the extent feasible. In other cases, the facility does not let the external vendors and contractors come into the building. Some decisions related to patient care and treatment are trying to determine what the line is between acute-care versus nonacute-care. For example, for the nonacute patients, can they be treated and managed in more of a custodial care (residential board and care per NFPA 101) environment versus a health care environment. SHAs are also being tasked with the assignment of helping to determine how and where the surge capacity will be managed. This involves the alternate care sites that include environments that were discussed by USACE.

**e. IFMA-Ken Bush** Requests for specific types of inspections are still coming through and are being handled on a case-by-case basis. These inspections include evaluation of existing/abandoned facilities that were previously used for some form of health care delivery, review of modifications to existing and functioning health care facilities, and the potential for alternate care site locations. No specific relief has been given with respect to the ITM process, however use of a third-party approval or self-approval approaches are now permitted. Some facilities have constructed temporary structures on their property for the drive up/drive-through testing programs as well as for overflow storage of medical supplies and equipment. State detention and correctional facilities have implemented programs for the occupants to produce hand sanitizing solutions and products. This introduces a new hazard that hadn't previously been contemplated for such environments. For the facility conversions (hotel or assembly to health care), such occupancies at a minimum need to be provided with an automatic sprinkler system and fire alarm system. Operational challenges include management of community volunteers who wish to help with various aspects of the temporary or modified operations and the presence of temporary and makeshift cooking operations.

**f. TJC-Herman McKenzie** We were unable to receive Herman's report due to a communication problem.

**g. DNV-GL-Kelly Proctor** Kelly had to leave the call due to a DNV-GL client issue related to COVID-19.

**h. IHS- Samuel Vega-Cotto** The IHS Division of Engineering Services is working to maintain a full operational status to the extent feasible. At this point, most of those operations are proceeding as normal. IHS staff although working remotely and encountering some challenges with that, have been able to maintain fundamental survey goals and compliance with TJC criteria. It is anticipated that satisfying specific elements of NFPA 101 will be more challenging as the number of patients continues to increase.

**i. ASHE-Chad Beebe** ASHE has been working to review various content and pieces of information to help focus and winnow down what some of the best practices are for their members. Health Care Engineers do not have the time or resources at present to figure these things out on their own as many of them are working 18 to 20 hours per day and sleeping at their facilities. The running list of items can be found at: [www.ashe.org/covid19resources](http://www.ashe.org/covid19resources). The Center for Healthcare Design has also issued guidance that provides considerations when hotel rooms and spaces are being considered or converted to health care inpatient treatment. ASHE has also reached out to the cruise ship industry to prepare for any plans that might involve those vessels being converted to non COVID-19 patient treatment facilities. Other ongoing challenges include use of alternative structures such as conex boxes and shipping containers for patient treatment. ASHE has issued guidance consistent with CDC provisions related to negative pressure patient room designs. ASHE is advising against facilities converting operating rooms into negative pressure environments. Other challenges include helping to identify sources of needed equipment and PPE — one such effort being the Million Mask Challenge. An online community has been established to connect solution providers directly to the hospitals in order to allow them to determine who has the appropriate inventory or service that is needed. The other emerging issue is as the alternate care sites are built out and becoming operational, real questions exist as to who will be staffing them. Health care facilities do not have excess staff to simply spread them out in an effective manner to work at locations outside of the normal hospital environment. My facilities have gone to 12 hour shifts while trying to manage staff members who may be out sick or may be in a 14-day quarantine environment. There is a concern that a safe environment for these health care workers is not being provided. Some facility and project work whether it involves modification for existing facilities, or construction of alternate care sites and facilities is being slowed down by local jurisdictions in some instances. Request for building permits, compliance with requirements for health care occupancies, and detailed plan review are all working against the limited time that is available for getting these things done. Facilities need to be able to scale back on ITM, drills, and other elements that are important to provide under normal circumstances. Time is clearly of the essence as the main start of the impending surge is expected to begin on Easter weekend, last for approximately eight weeks and then take several months for the recovery period.

**j. AHCA-Ajay Prasad/David Hood** Facilities are experiencing the same type of issues regarding external vendors and personnel coming into facilities — some companies will not come in while in other cases the facility does not want any outside visitors or vendors of any sort to enter the premises. Facilities are preparing and developing ILSMs in order to determine what measures can offset the inability to comply with ITM and operational criteria. More frequent use and disposal of PPE requiring more or larger container sizes (same issue noted by VA). Also working to determine design ideas for airborne isolation areas within facilities. Maintaining adequate staffing levels and challenges associated with staff who may be ill or in a self-quarantine period must also be considered. Considerations for alternate care sites may include evaluation of previously decommissioned hospital facilities. In other cases, the LTC residents may be relocated to other facilities (such as the hotel) and the LTC facility may be converted to a COVID-19 treatment center.

**5. Q and A.** Following the information from the eight organizations, a general discussion was initiated regarding what everyone just heard and other ideas that should be considered. That discussion is as follows.

Dave Klein: a warning to everyone to be aware of counterfeit PPE that has flooded the market. It does not meet the criteria or standards that are necessary.

Joe Bermes: it will be useful to provide links to some of the websites and resources that have been mentioned during the discussion.

Chad Beebe: everyone needs to think of how the needed level of medical care can be provided under these circumstances. Compliance with established codes and standards, regardless if it's NFPA 99 or NFPA 101 can't be met for many of these circumstances.

Jim Hogenson: While health care delivery models normally refer to a “standard of care”, we are now operating in a “sufficiency of care” model. Challenges for the ACS models include applying basic provisions from the code related to design of patient treatment suites. In the convention type facilities, reliance on overhead sprinkler systems is a key factor, but once the isolation rooms or pods are installed (typical design calls for a 10' x 10' space), the sprinkler protection will not extend into that space as they have a ceiling configuration of some sort. Depending on the care level (acute/nonacute), installation of smoke alarms or smoke detectors inside of the spaces with some type of visual notification appliance outside of each space can help to offset the lack of the sprinkler. Nursing stations are configured in such a way that a fairly substantial line of sight is provided to each room or space. The intent is to try to comply with local code provisions and coordinate with local AHJs as much as possible but as previously mentioned, they may be asking for items that simply aren't feasible. Some of the convention center/arena ACS projects are looking at designing patient care spaces in skybox and concourse areas—something that wasn't necessarily contemplated previously.

Chad Beebe: while it is definitely preferable to find a hotel or motel that is protected with automatic sprinklers as the ACS, a process should be available that allows a risk-based approach to determine if that is always the best solution. For example, if the hotel is directly across the street from the health care occupancy, but doesn't have the sprinkler system, do you potentially jeopardize the level of medical care for circumstances in which a patient would have to be brought directly into the hospital for a more extensive treatment.

Mike Crowley: there may be a way to utilize the document like NFPA 551, Fire Risk Assessment to help determine that balance between the fire and life safety risk versus the COVID-19 medical risk. Also wanted to mention the use of video detection technology — especially for the large open spaces such as the convention centers and arenas. It is an effective system that is designed to cover these types of large areas.

Ken Bush: agrees that during these circumstances that the formal regulations literally go out the window. Attempting to comply previously known and established requirements or guidelines doesn't work. Reviewing criteria for ACS has to include not only traditional fire and life safety issues but also other factors such as availability of reliable electricity, water supply, sanitation, and HVAC/ventilation capabilities. Factors such as the number of patients, building construction features, physical location with respect to a full-service hospital, coupled with the usual code requirements have to be balanced against the ultimate goals of patient treatment.

Chad Beebe: at least one member has encountered an AHJ who was trying to enforce a limit on the number of "E" cylinders in a tent configuration to 12. In an ICU setting where a patient may be on a ventilator, typically need 12 E cylinders per day just for one patient. This is the type of enforcement and regulation criteria that extreme relaxation needs to be applied to.

Variations on these challenges include waivers being issued by state health care agencies-how or to what extent will the CMS provision still be applied to the circumstances.

Things are moving quickly to the point where many of these issues can't be evaluated in detail on a case-by-case basis.

If possible, decompress the mandatory patients into the ACS facilities first and preserve the purpose-built hospital environments for the more critical cases.

Bill Koffel: asked if the group would be willing to consider a checklist or some type of predetermined set of criteria that needs to be evaluated as part of this process. The CMS 1135 Waivers allow the provider to give a level of "reasonable care". That looks very different now than it did 60 days ago. An example would be to devise a decision tree approach of some sort. As noted previously, can you relocate the nonacute care patients into the hotel environment provided the hotel has some fundamental or basic safety provisions. How critical is the code mandated corridor width under these circumstances? Is there way to integrate or implement the risk-based criteria contained in portions of NFPA 25 regarding ITM? How do you prioritize the importance of one element over another? There are methods to do that and this is how that approach might work.

John Williams: Providing some form of guidance like this in a partnership approach would get the numerous stakeholders to a point of safe harbor or at least offer some guidance that they could consider for their circumstances. The states would appreciate this type of criteria from the HITF as it would greatly assist with making judgment calls.

Ken Bush: Agrees that it will help guide AHJ decisions, but does not guarantee that they would be utilized in all cases or circumstances. A document that can have an appearance as a recommended practice and that could be applied and scaled based upon the individual circumstances will be helpful.

Pete Larrimer: The VA has left these types of criteria and ideas fairly open to be addressed at the local level. Need to make sure that the approach also considers ITM provisions related to medical gas supply – regardless if it is a piped supply or cylinder

supply. May want to look at language contained in NFPA 72 that permits deferring ITM actions on systems and components that are inaccessible for safety reasons until the facility is shut down for maintenance or some other scheduled shutdown.

Robert Solomon: Will discuss these approaches internally at NFPA and determine how we may be able to move on this as soon as possible. An issue will be how does NFPA issue guidance or statements that are contrary to prevailing code requirements.

Bill Koffel: may have the ability to do this under the umbrella of the FPRF. The HITF could serve in a role as both the project contractor and the project technical panel.

Robert Solomon: Asked if anyone has dealt specifically with some of the emergency/backup power requirements that may be necessary in some of the facilities.

Chad Beebe: most facilities appear to be utilizing trailer mounted generators when necessary systems or capacity is not present. In other circumstances, facilities are simply buying off the shelf generators from home-improvement stores (Home Depot) and using extension cords — whatever is necessary to keep equipment functional.

Ken Bush: what are some of the challenges that have been encountered with regard to providing sprinkler protection in the standalone (Tent/Membrane) structures thus far.

Jim Hogenson: the field and site evaluations for the existing structures include looking for buildings that already have an NFPA 13, or NFPA 13 R sprinkler system. Modular units and tent/membrane structure designs are evaluated to determine if installing sprinklers is possible. The other option would be to limit the size of these configurations to limit the number of patients and staff who may be in an unprotected space.

Ken Bush: can membrane structures support installation of sprinkler piping? Is water mist an alternative that could be considered?

Robert Solomon: most membrane structures should have more structural capability to support sprinkler system piping when compared to a tent structure. Some determinations would have to be made if all of the support criteria of NFPA 13 can be applied (five times weight of water filled pipe +250 pound point load). Nonmetallic, CPVC piping could be utilized. One caution regarding water mist is that the droplets are so fine that they are easily inhaled and could actually cause breathing problems for people with compromised pulmonary or respiratory conditions.

Pete Larrimer: wanted to mention one other item related to the on-site pharmacy hand sanitizer process. The isopropyl alcohol is coming in large, 5-gallon storage containers that are plastic. This appears to be in conflict with the current requirements of NFPA 30 and some guidance may be needed around that issue.



**6. Next Steps.** Robert Solomon will follow up with internal resources at NFPA to determine what role NFPA and FPRF can have in this initiative. It was suggested that a follow-up call be scheduled for later in the week — that will be held on Friday April 3<sup>rd</sup> from 12:30-2:30 PM.

**7. Adjournment.** The meeting adjourned at 2:17 PM.