

**Washington State
Department of Health**

Workshop 1

Review proposals to
Modify Draft Rules
Chapter 246-320 WAC
(Construction Standards only)

Agenda

October 1, 2018

Public Workshop Meeting 1 – Review Draft Proposals

October 1, 2018

9 a.m. – 5 p.m.

Department of Health

Creekside Two at CenterPoint

20425 72nd Ave S, Suite 310, Kent, WA 98032

This meeting is to review each proposal submitted during the proposal period. This includes the draft proposal to adopt the 2018 version of the Facility Guidelines Institute (FGI)'s *Guidelines for Design and Construction of Hospitals* and *Guidelines for Design and Construction of Outpatient Facilities*. Attendees will have an opportunity to speak on any proposal and make advisory opinion to either support or not support each proposal during the meeting.

Agenda:

1. Introductions
2. Quick review of rule making process
3. Review agenda
4. Review proposals (order shown in this document)
5. Questions and next steps

Next Steps:

After this meeting, the Department of Health (DOH) will publish the Report on Proposals. Any interested party may submit a comment on one of the previously submitted proposals. November 21, 2018 is the deadline for submitting comments.

A second public meeting is tentatively scheduled for December 5, 2018

DOH Contacts:

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Proposal 001:

Submitter: Susan Upton

Section: Hospital 2.2-3.4.2.1 Imaging Room Classification

Proposal: Revise text as follows:

2.2-3.4.2 Imaging Rooms

2.2-3.4.2.1 General

(1) The requirements in this section shall apply to imaging rooms for all modalities except where indicated.

(2) Where an Imaging room will be used for Class 1 and Class 2 procedures, the more stringent for the higher class shall be followed.

(3) Where imaging procedures meeting Class 3 criteria are performed, a room(s) that meets the requirements for the applicable imaging suite and for an operating room (see Section 2.2-3.3.3, Operating rooms) shall be provided. An operating room that meets the requirements in Section 2.2-3.3.4 (Hybrid Operating Room) shall be permitted to meet this requirement.

(4) Cardiac Catheterization Labs shall meet the requirements of operating rooms, including meeting the operating room requirements in ASHRAE 170.

Statement of Problem and Substantiation:

The proposal attempts to clarify how the 2018 version of the FGI classifies cath labs. The 2018 version of the guidelines divide imaging rooms into three semi-distinct categories: Class 1, 2 and 3. The differences between the classifications and the requirements for each can be found in this section and Table 2.2-2 (page 219) in the Hospital book. Looking at the table, it's not entirely clear where the cath lab fits. EP labs are described in Class 2, but invasive procedures are clearly put in Class 3. Our understanding of this change is to identify and mitigate the risks associated with invasive procedures in any diagnostic space. We have certainly seen an increased prevalence and desire to do more and more invasive procedures in the cath lab.

This proposal takes the most restrictive approach by calling all cath labs operating rooms regardless of function. We believe this impacts the built environment in three specific ways:

- Finishes: the biggest change is hard lid ceiling requirements in cath labs, currently special suspended ceilings are allowed.
- Ventilation: Air changes would be increased from 15 to 20 air changes per hour. Also a specific diffuser array would be required over the table and low-wall returns.
- Access to the cath lab would be from a restricted area (behind the red line).

Other information:

Reference Glossary Invasive procedure: ... “An invasive procedure may fall into one or more of the following categories:Does not begin as an open procedure but has a recognized measurable risk of requiring conversion to an open procedure.”

Cath Lab room classification was brought up by Doug Erickson at the 2018 ASHE Annual Seattle Conference and the audience vote was overwhelmingly in support of the Cath Lab as Class 3/ OR setting.

Cost Impacts: The installation cost for a smooth clipped acoustical ceiling and a hard lid are pretty similar, the major cost impact would be the difficulty of access during normal operation. We roughly estimate a \$10,000 increase for extra mechanical costs. Semi restricted access is operational with limited construction cost.

Benefits: Clarity, and additional safety for rooms that perform more invasive procedures.

Proposal 002:

Submitter: Susan Upton

Section: Outpatient 2.1-3.5.1.2 Imaging Room Classification

Proposal: Revise text as follows:

2.1-3.5.1 General

2.1-3.5.1.2 Imaging room classification.

To differentiate the design and construction requirements needed to achieve the environmental controls and other requirements that support the amount of intervention to be provided, imaging rooms shall be classified as described in Table 2.1-5(Classification of Room Types for Imaging Services). Cardiac Catheterization Labs shall meet the requirements of operating rooms, including meeting the operating room requirements in ASHRAE 170.

Statement of Problem and Substantiation:

This is identical to proposal 001, only difference is this applies to outpatient.

Cost Impacts: This is identical to proposal 001, only difference is this applies to outpatient.

Benefits: This is identical to proposal 001, only difference is this applies to outpatient.

Proposal 003:

Submitter: Susan Upton

Section: ASHRAE Standard 170 - 7.4.3

Proposal: Revise text as follows:

7.4.3 Imaging Procedure Rooms. If invasive procedures occur in this type of room, ventilation shall be provided in accordance with the ventilation requirements for procedure rooms. ~~If anesthetic gases are administered, ventilation shall be provided in accordance with the ventilation requirements for operating rooms.~~

Statement of Problem and Substantiation:

This proposal is intended to provide clarification and eliminate conflicts with Table 8.1 Design Parameters – Hospital Spaces. Some people interpret that the sentence being removed applies to all of Table 8.1. This table includes specific requirements for X-ray (surgery/critical care and catheterization) positive pressure, (3) outdoor and (15) total ach.

Other people believe this only applies to the OR ventilation requirements (in addition to table 8.1) are provided under section 7.4 which addresses: room controls, supply diffuser array and low returns. Requiring a room to meet invasive procedure requirements (and need for OR level ventilation) just because they use of anesthesia gas is not founded. As an example, nitrous oxide could be used in a pediatric MRI that is diagnostic only. Additional OR ventilation requirements would not be needed in this case.

This proposal completely eliminates the requirement and potential confusion. Refer to proposal 001 and 002 for direction on ventilation in Cath Labs.

Cost Impacts: Removes cost.

Benefits: clarity, directs effort and attention to risks more appropriately

Proposal 004:

Submitter: John Williams

Section: ASHE 170 – Section 6.1.2.3

Proposal: Add new section as follows:

6.1.2.3

Systems that provide heating whose source is dependent on variables outside of the facilities direct control shall provide a redundant heating source to provide the capability of maintaining the internal temperatures listed in Table 7-1. Examples of these types of systems include but are not limited to solar heating, heat pumps, geothermal heat, and variable refrigerant flow systems.

Exception: The facility or designer can demonstrate through independent engineering analysis and commissioning that the system is capable of maintaining facility temperature that support the facility operational plan. This includes continuity of operations, continuous operation of water-based systems and equipment, and patient care and comfort.

Statement of Problem and Substantiation:

Some of the new energy efficient HVAC systems are dependent on environmental factors – outside air temperature, sunlight, etc. The manufacturers of these system are developing more powerful and effective systems which may or may not meet the operational needs of a healthcare facility. The codes and standards have not adequately addressed these new systems and warrant some functional consideration. Since the effectiveness of these system depend on a factor that is out of the facility’s control, we believe that some level of redundancy should be required to maintain reasonable operation.

This proposal provides that redundancy only for those facilities that choose to use these systems. It does not specific the method of redundancy (electric reheat, hydronic, etc.) it only requires that the redundant system maintains temps inside of the facility. An exception is allowed to pursue an alternate path, and it provides some validation that the system will perform.

This addresses a gap in the code, and will allow CRS to prevent design that put facilities in jeopardy.

Cost Impacts: We estimate approximately \$6.50 per square foot cost increase to those facilities that choose these systems.

Benefits: Hospitals will be more resilient and maintain continuous operations longer.