

# Hospital Inspector Recertification Program

- Updates to Title 24, Parts 4 and 5
- 2019 Mechanical and Plumbing Codes

We add the word “transfer” to the prohibition of rated corridors being used to transfer air for uses other than rooms with pressure requirements.

***407.4.1.3** Corridors shall not be used to convey supply, return, transfer or exhaust air to or from any room if the corridor is required to be fire resistive construction per the California Building Code.*

- We add Drug room and compounding to table 4-A. Requirements listed are from USP/BOP requirements, with the exception of humidity requirement for HD buffer. We added that to ensure a maximum humidity for transfer air into the HD buffer.
- We added *Newborn intensive care formula room* to Table 4-A, based on input from CDPH. It's the same here as Food prep, except that this space is positive pressure. The filtration requirement for this space in Table 4-2 is the highest level, up through MERV 17.
- We clarify footnote e on Table 4-A, directing the reader to ASHRAE 170 for pressure requirements regarding All, PE and related ante room pressures.

For All and PE alarms, this change was inserted into Section 416.0 to eliminate confusing conflicts between CMC and ASHRAE 170. We also removed the conflicting language in footnotes t (P.E.) and u (A.I.I.)...

*The alarm shall annunciate when the supply, return, or exhaust fans are interrupted or when the minimum required pressure differential per ASHRAE 170 between the airborne infection isolation room and corridor or between the protective environment room and corridor is not being met during closed door conditions.*

New language on neonatal intensive care units:

**419.0 Neonatal Intensive Care Units. [OSHPD 1]**

**419.1 Formula Preparation Area. Air shall be supplied over the formulation preparation area by group E, nonaspirating supply diffusers. Air shall be returned or exhausted by registers located not less than 3 inches (76 mm) nor more than 8 inches (203 mm) above the finished floor in the cleanup area.**

**419.2 Treatment Area/Room. Air shall be supplied over the treatment surface by group E, nonaspirating supply diffusers. Air shall be returned or exhausted by registers located not less than 3 inches (76 mm) nor more than 8 inches (203 mm) above the finished floor, adjacent to the treatment surface.**

Change to Table 4-B for neonatal intensive care units:

AREA DESIGNATION	MINIMUM NUMBER OF FILTER BANKS	FILTER EFFICIENCY % FILTER BANK		
		(MINIMUM EFFICIENCY REPORTING VALUE MERV) <sup>5</sup>		
		NO. 1 <sup>1</sup>	NO. 2 <sup>1</sup>	NO. 3 <sup>1</sup>
<i>Orthopedic operating room, bone marrow transplant operating room, organ transplant operating room, NICU formula preparation room, NICU treatment area/room</i>	3	30%	90%	99.97% <sup>3</sup>
		(8)	(14)	(17)

Some new items as seen in Table 4-A

FUNCTION OR SPACE	PRESSURE RELATIONSHIP TO ADJACENT AREAS (f) (n)	MINIMUM OUTDOOR ACH	MINIMUM TOTAL ACH	MINIMUM TOTAL ACH IF 100% O.A.	ALL ROOM AIR EXHAUSTED DIRECTLY TO OUTDOORS (j)	AIR RECIRCULATED BY MEANS OF ROOM UNITS (a)	DESIGN RELATIVE HUMIDITY(k), %	DESIGN TEMPERATURE (l), °F/°C
Newborn intensive care	Positive	2	6	6	NR	No	30-60	72-78/22-26
<i>Newborn intensive care formula room</i>	<i>P</i>	<i>2</i>	<i>10</i>	<i>10</i>	<i>NR</i>	<i>No</i>	<i>NR</i>	<i>NR</i>
Newborn/well baby nursery suite	NR	2	6	6	NR	No	30-60	72-78/22-26
<i>Nurse station (aa)</i>	<i>(aa)</i>	<i>(aa)</i>	<i>2</i>	<i>2</i>	<i>(aa)</i>	<i>(aa)</i>	<i>(aa)</i>	<i>(aa)</i>
<i>Observation</i>	<i>NR</i>	<i>2</i>	<i>6</i>	<i>2</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>70-75/21-24</i>

Some new items as seen in Table 4-A, Cont.

FUNCTION OR SPACE	PRESSURE RELATIONSHIP TO ADJACENT AREAS (f) (n)	MINIMUM OUTDOOR ACH	MINIMUM TOTAL ACH	MINIMUM TOTAL ACH IF 100% O.A.	ALL ROOM AIR EXHAUSTED DIRECTLY TO OUTDOORS (j)	AIR RECIRCULATED BY MEANS OF ROOM UNITS (a)	DESIGN RELATIVE HUMIDITY(k), %	DESIGN TEMPERATURE (l), °F/°C
<i>Drug room</i>	<i>NR</i>	<i>2</i>	<i>4</i>	<i>2</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>HD ante room (b)</i>	<i>Positive</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>&lt;60</i>	<i>≤68/≤20</i>
<i>HD buffer room (b)</i>	<i>Negative</i>	<i>NR</i>	<i>30</i>	<i>30</i>	<i>Yes</i>	<i>No</i>	<i>&lt;60</i>	<i>≤68/≤20</i>
<i>HD segregated compounding area (b)</i>	<i>Negative</i>	<i>NR</i>	<i>12</i>	<i>12</i>	<i>Yes</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>HD storage (b)</i>	<i>Negative</i>	<i>NR</i>	<i>12</i>	<i>12</i>	<i>Yes</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>Non-HD ante room (b)</i>	<i>Positive</i>	<i>NR</i>	<i>30</i>	<i>30</i>	<i>NR</i>	<i>NR</i>	<i>&lt;60</i>	<i>≤68/≤20</i>
<i>Non-HD buffer room (b)</i>	<i>Positive</i>	<i>NR</i>	<i>30</i>	<i>30</i>	<i>NR</i>	<i>No</i>	<i>&lt;60</i>	<i>≤68/≤20</i>
<i>Non-HD segregated compounding area (b)</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>Seclusion room</i>	<i>NR</i>	<i>2</i>	<i>6</i>	<i>2</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>Substerile service area</i>	<i>NR</i>	<i>2</i>	<i>6</i>	<i>6</i>	<i>NR</i>	<i>No</i>	<i>NR</i>	<i>NR</i>

This was reduced from 10 ACH.



We modified footnote b on Table 4-A to add clarity and direct the design professional regarding requirements for compounding. These are essentially USP and Board of Pharmacy requirements, in simpler language.

*b. Additional air change, ISO class, differential pressure, continuous pressure monitoring and filtering requirements for compounding areas shall comply with California Board of Pharmacy regulations Title 16 §1735 & §1751, and USP <797> & <800>. Air supplied to the cleanroom suite must be introduced through 99.97% minimum HEPA filters located in the ceiling. At least 15 air changes per hour (ACPH) shall be provided to nonhazardous drug (non-HD) compounding buffer rooms through the ceiling. The HEPA filtered air from the PEC in the non-HD buffer room, when added to the HVAC-supplied HEPA-filtered air, shall increase the total HEPA-filtered ACPH to at least 30. If the PEC is used to meet the minimum total ACPH requirements, the PEC must not be turned off except for maintenance. All hazardous drug (HD) compounding areas and PECs shall be exhausted externally through 99.97% HEPA filtration. Minimum air changes shall be met under operating conditions. Returns and exhaust grilles shall be mounted low on the wall unless a visual smoke study demonstrates dilution of particles and sweeping out of particles from the entire room. One return/exhaust should be placed near the refrigerator compressor.*

A couple new footnotes were added to Table 4-A. The first, aa, opens up the requirements for nurse stations:

aa. Nurse station pressure relationship and ventilation requirements shall match the area in which it is located.

The second, ab, specifies that non-Table 4-A spaces shall meet ASHRAE 62.1. Note that this information will likely be relocated to the text near the beginning of Chapter 4 in the intervening cycle. Also, we are drafting CAN language to clarify specifics on these 62.1 minimums:

ab. Air change per hour and ventilation rates for spaces not listed in Table 4-A may be per ASHRAE 62.1.

## Floor drains eliminated in compounding suite.

- || **310.10 [OSHPD 1, 1R, 3, 4 & 5]** *Floor drains, waste traps and handwashing fixtures shall not be installed in operating and delivery rooms. Floor drains with self-priming traps may be installed in cystoscopic rooms. Floor drains shall not be installed in compounding buffer or ante rooms.*

➤ **Table 4-2, *Minimum Plumbing Facilities:***

- **Emergency Service area (removed “treatment room”). Added 1 toilet for open plan, and 1 per 6 beds for Observation Units.**

SPACE	HANDWASHING FIXTURE	SCRUB SINKS <sup>3</sup>	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS <sup>1</sup>	CLINIC SINKS
<i>Emergency Service</i>	<i>1</i>					
<i>Open plan</i>	<i>1:4 cubicles</i>		<i>1</i>			
<i>Observation unit(s)</i>	<i>1:4 cubicles</i>		<i>1:6 beds</i>			

- **Table 4-2, *Minimum Plumbing Facilities:***
  - **(N)NICU treatment area/room, handwashing fixture.**

<i>Newborn Intensive Care Unit (NICU)</i>	<i>1:4 bassinets<sup>17, 33</sup></i>				<i>1</i>	<i>1</i>
<i>Treatment area/room</i>	<i>1</i>					

- **Table 4-2, Minimum Plumbing Facilities:**
  - **Central bathing: added one handwash fixture**
  - **(N)Special bathing facility: bathtub or shower**
  - **Admin Center is now just Nurse Station**

SPACE	HANDWASHING FIXTURE	SCRUB SINKS <sup>3</sup>	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS <sup>1</sup>	CLINIC SINKS
<i>Central bathing facility</i> <sup>16</sup>	<u>1</u>		1	1		
<i>Special bathing facility</i> <sup>16</sup>				<u>1</u>		
<del><i>Administration Center or Nurses' Stations</i></del> <sup>27</sup>	1		1 <sup>12</sup>			
<i>Central bathing facility</i> <sup>16</sup>	1		1	1		
<i>Special bathing facility</i> <sup>16</sup>				1		
<i>Nurse Station</i> <sup>27</sup>	1		1 <sup>12</sup>			

- **Table 4-2, *Minimum Plumbing Facilities:***
  - **(N)Outpatient observation, handwashing fixture and toilet.**

SPACE	HANDWASHING FIXTURE	SCRUB SINKS <sup>3</sup>	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS <sup>1</sup>	CLINIC SINKS
<i>Outpatient observation</i> <sup>35</sup>	1		1			

<sup>35</sup> *A minimum of one separate accessible toilet room shall be provided for the use of patients. Patient toilet room(s) shall be equipped with a handwashing fixture and shall be accessible to the observation units(s) from the corridor. Reference CBC, Part 2, Section 1224.39.6.*

- Floor drains eliminated in compounding suite.
- Table 4-2, *Minimum Plumbing Facilities*:
  - Added footnote 33 for compounding parenteral solutions: non-contact handwash fixtures.

<i>Compounding area for parenteral solutions</i>	<i>1<sup>33</sup></i>					
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- Floor drains eliminated in compounding suite.
- Table 4-2, *Minimum Plumbing Facilities*:
  - Added Mammography
  - Added Interventional imaging
  - Note where CT was removed from table just above Mammography...

SPACE	HANDWASHING FIXTURE	SCRUB SINKS <sup>3</sup>	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS <sup>1</sup>	CLINIC SINKS
<i>Mammography</i>	<i>1</i>					
<i>Interventional imaging</i>		<i>1</i>				

- Floor drains eliminated in compounding suite.
- Table 4-2, *Minimum Plumbing Facilities*:
  - (N)Infusion therapy, handwashing fixture.

SPACE	HANDWASHING FIXTURE	SCRUB SINKS <sup>3</sup>	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS <sup>1</sup>	CLINIC SINKS
<i>Speech pathology</i>	<i>1</i>					
<b>  </b> <i>Infusion Therapy</i>	<i>1</i>					

