



# **MAJOR FGI CHANGES 2014-2022**

Office of Community Health  
Systems



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Washington State Department of Health



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# Background



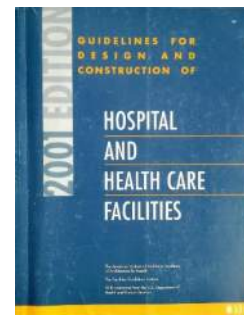
1940s



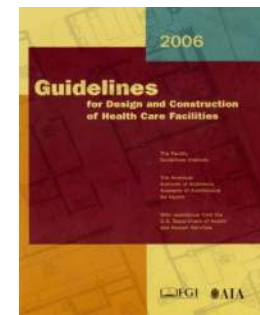
1980s



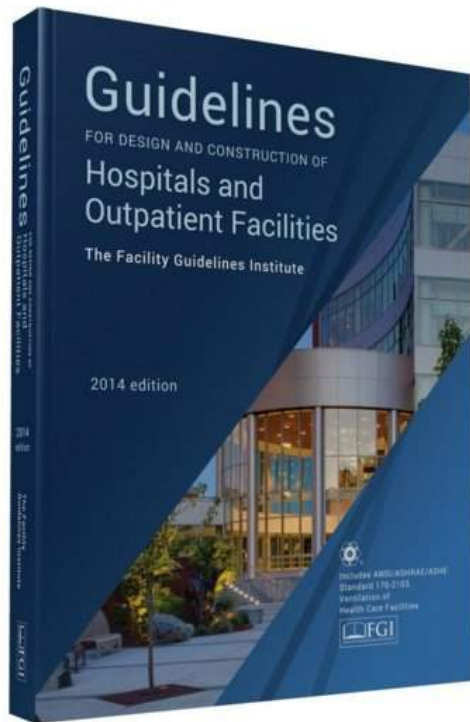
1990s



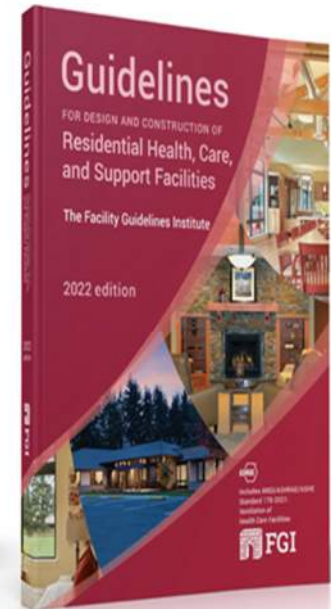
2001



2008



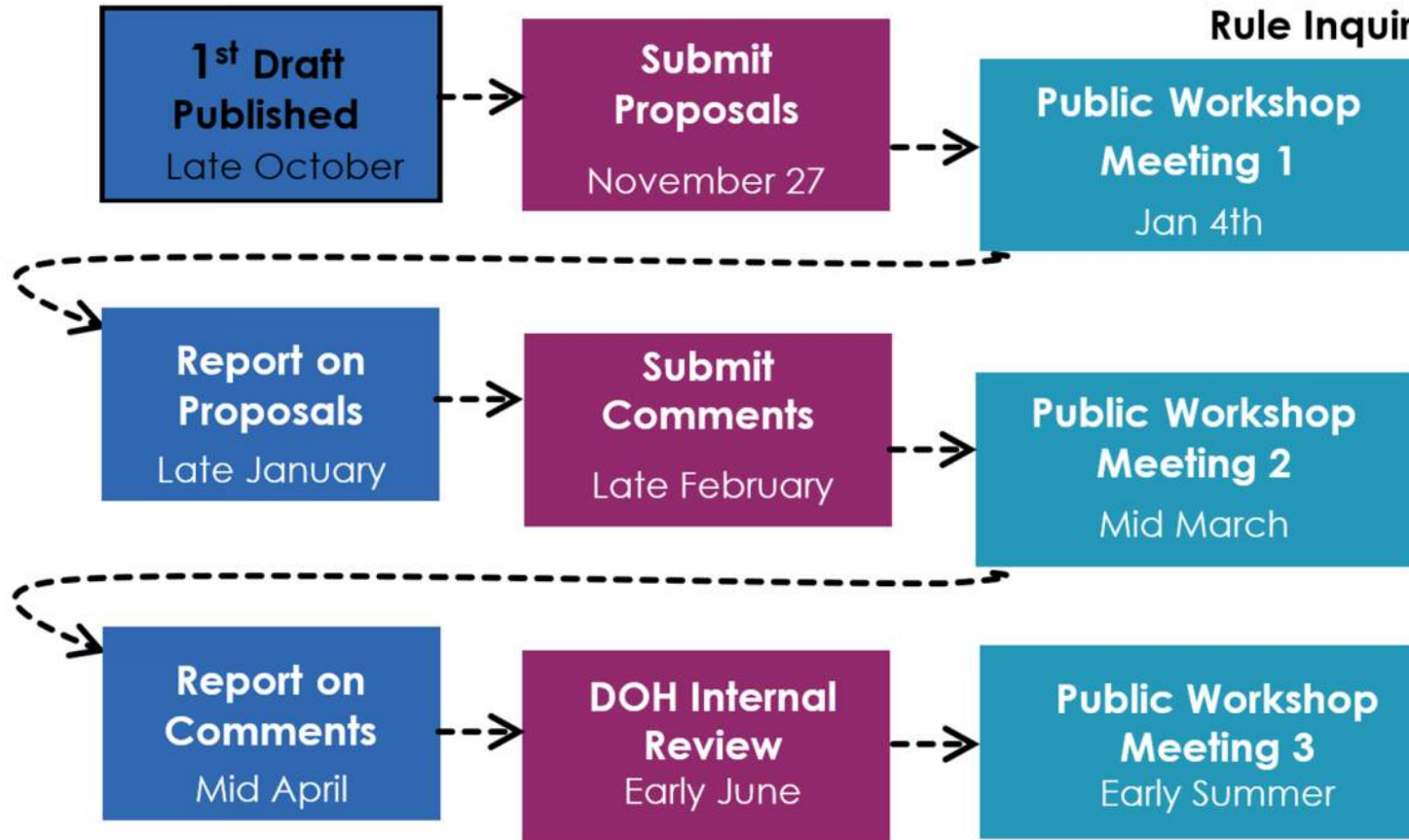
2014



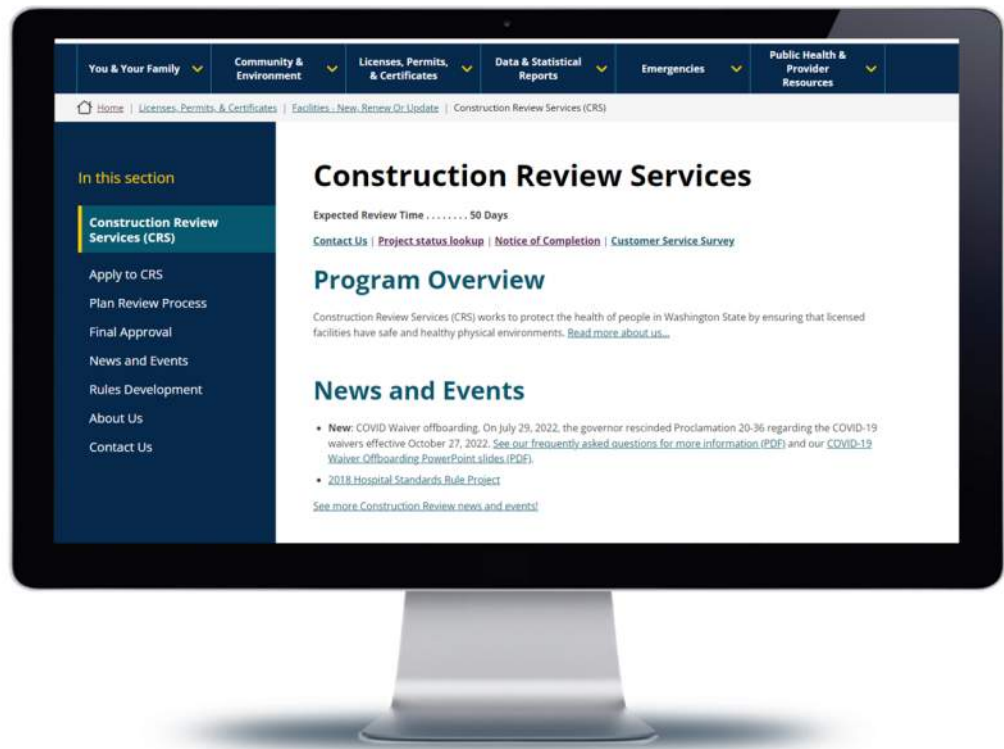
2022

1

Rule Inquiry



# www.doh.wa.gov/crs





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# Deep Dives

- **Operating/procedure rooms**
- **Behavioral and mental health**
- **Emergency department**
- **Approach**
- **Emergency conditions**





# Small Changes

- **Memorable**
- **Big impacts**



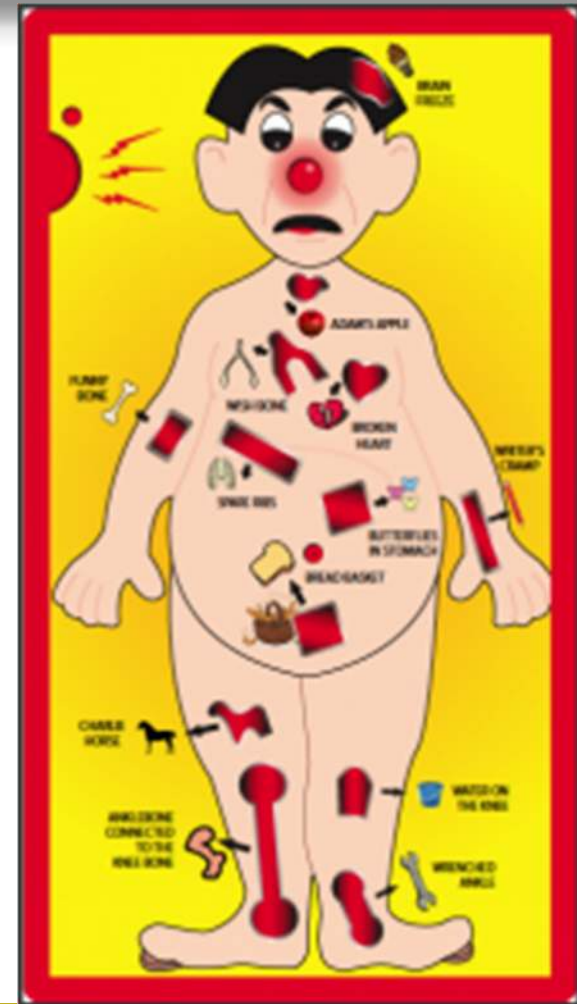
# Deep Dives

- **Operating/procedure rooms**



# Question

- What is the difference between an operation and a procedure?





Invasive procedure – Operating room



Patient care that requires high-level disinfected or sterile instruments but does not require OR environmental controls – Procedure room



Non-invasive procedure – Exam room  
Treatment room

**Circulating sides:** The sides of a specified object (e.g., a patient bed or exam table) where access by patient, provider, or technician is required.

**Class 1 imaging room:** An imaging room designated for the performance of patient care activities that may require high-level disinfected or sterile instruments but do not require the environmental controls of a Class 2 imaging room.

**Class 2 imaging room:** An imaging room designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but do not require the environmental controls of a Class 3 imaging room.

**Class 3 imaging room:** An imaging room that meets the definition of an operating room and has equipment to enable diagnostic imaging before, during, and after surgical procedures.



**Exam room:** A room designated for the performance of patient care activities that may require high-level disinfected or sterile instruments but do not require the environmental controls of a procedure room.

**Procedure room:** A room designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but do not require the environmental controls of an operating room.

**Operating room (OR):** A room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing invasive procedure.

**Procedural fluoroscopy:** Therapeutic or diagnostic procedures that require fluoroscopic imaging (e.g., cardiac catheterization, interventional angiography, cardiac stenting, or implantation of devices). **Note:** These procedures are typically performed in a restricted or semi-restricted area, based on the classification of the imaging procedure being performed.



Procedure Room Type	Imaging Room Type	Use
Exam/ Treatment Room	Class 1 Imaging Room	A room designated for the performance of patient care that may require high-level disinfected or sterile instruments but is <b>not required to be performed with the environmental controls of a procedure room.</b>
Procedure Room	Class 2 Imaging Room	A room designated for the performance of patient care that requires high-level disinfection or sterile instruments and some environmental controls <b>but is not required to be performed with the environmental controls of an operating room.</b>
Operating Room	Class 3 Imaging room (Hybrid OR)	A room that meets the requirements of a restricted area, is designated and equipped for performing surgical or other invasive procedures, and has the <b>environmental controls for an OR as indicated in ASHRAE 170.</b> An aseptic field is required for all procedures performed in an OR.

# STUDY BY AMERICAN SOCIETY OF ANESTHESIOLOGISTS w/ CLEMSON Operating Room Architectural Flow Diagram

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-  Nurses
-  Anesthesiologists
-  Surgeons
-  Perfusionists

**ANESTHESIOLOGY**  
The Journal of the American Society of Anesthesiologists, Inc.

**Realizing Improved Patient Care through Human-centered  
Operating Room Design:**

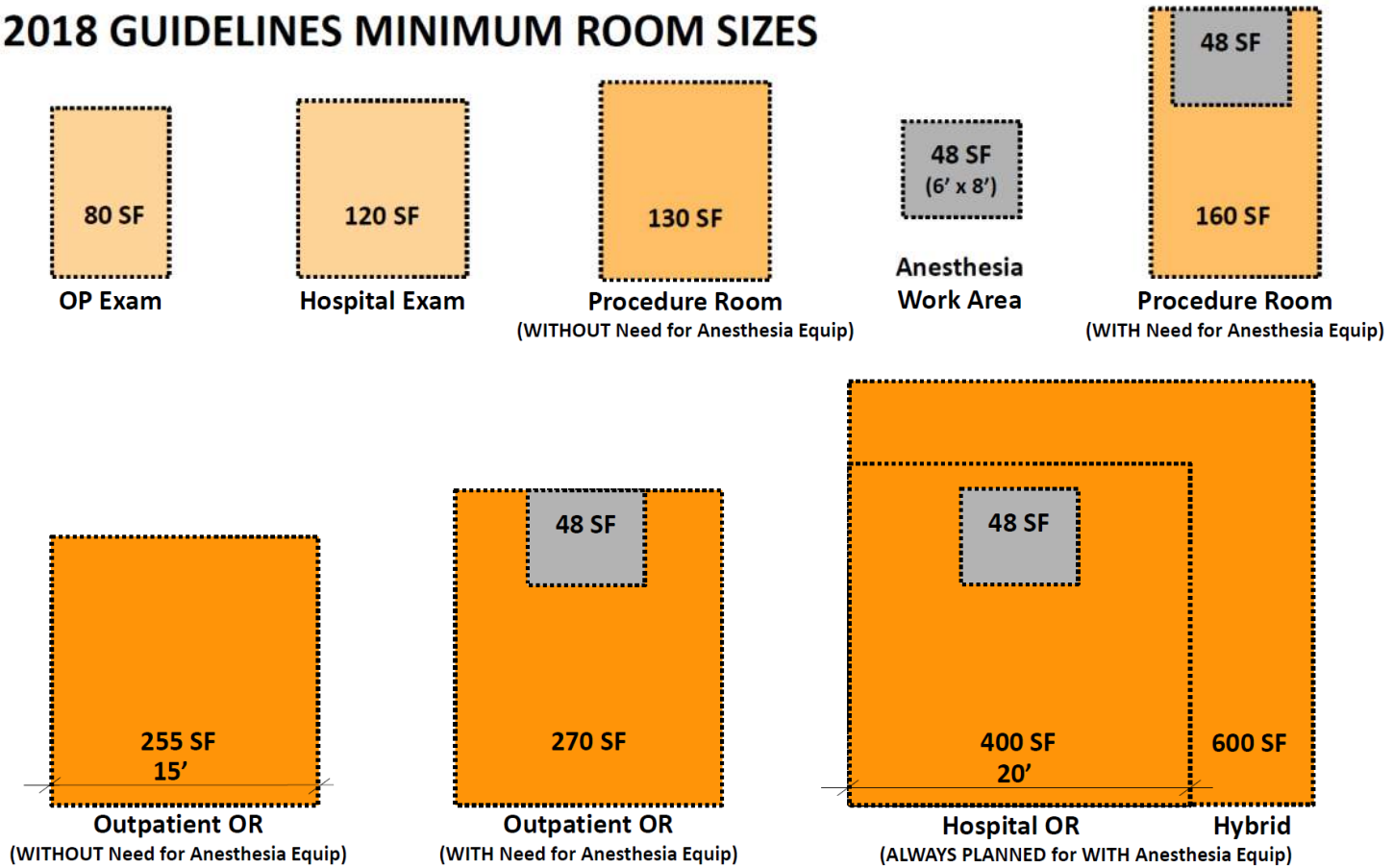
*A Human Factors Methodology for Observing Flow Disruptions in  
the Cardiothoracic Operating Room*

Anesthesiology, 2013;119(5):1066-1077.  
doi:10.1097/ALN.0b013e31829f68cf

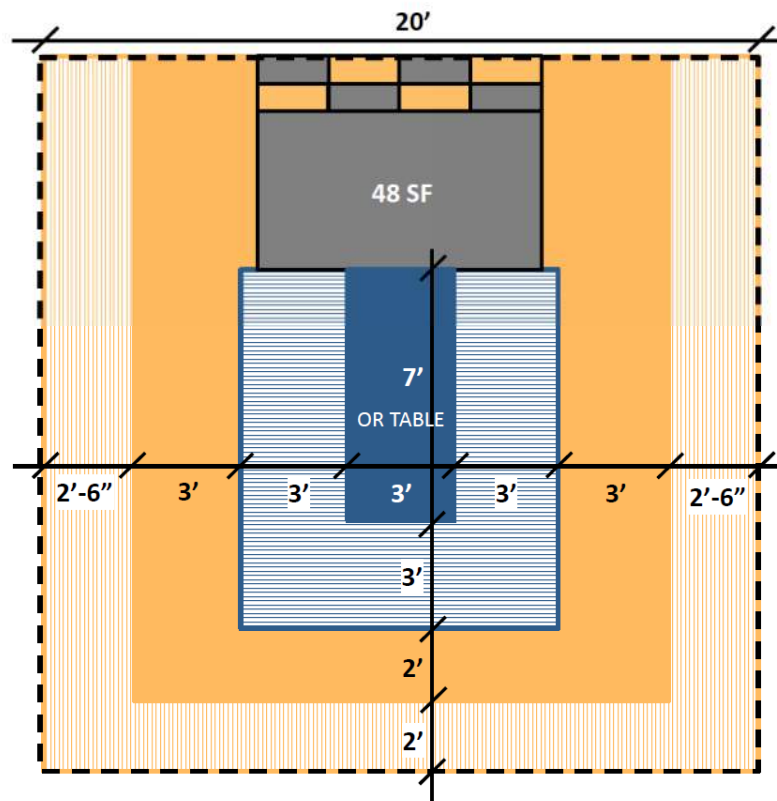




## 2018 GUIDELINES MINIMUM ROOM SIZES



# CLEARANCE ZONE DIAGRAM OPERATING ROOM – INPATIENT

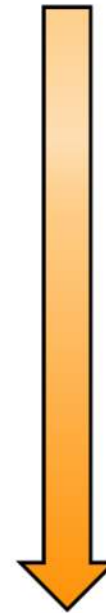


## INPATIENT OPERATING ROOM

- Patient area
- Sterile field where scrub and physician work
- Circulation pathway where the circulator walks to perform duties. Cannot walk into sterile field.
- Movable equipment zone where the required movable equipment is stored and provides for door swing and opening of fixed drawers or opening of door and drawers on carts
- Anesthesia 6' x 8' work zone
- Gray and White area is 2' area shared between anesthesia and circulator.
- CFA Clear Floor Area - 400 SF

3' X 7' Gurney for planning purposes  
 3' at Sides & Foot – Sterile Field  
 3' at Sides, 2' at Foot – Circulation  
 2'-6" at Sides, 2' at Foot – Equipment  
 20' Minimum Width, 400 SF Minimum CFA

	Level of Invasiveness	Risk of Infection	Sterility of Environment	Infrastructure Room Finishes
<b>1</b>	Non Invasive	Low	Low, 4-6 ACH	Low
<b>2</b>	Limited		15 ACH	
<b>3</b>	Invasive, Any	High	High, 20 ACH	High





## Sterile processing

- Back to traditional 2-room design
- Single room with small tabletop sterilizer
- Ultrasound wand cleaning area

@HOK

## Surgical services

Storage for the bed or gurney used to transport a patient to and from the operating room must be provided in an adjacent semi-restricted area.

The clean and sterile supply storage supporting ORs must be the greater of 300 square feet or 100 square feet per operating room.



@HOK

# Deep Dives

- Behavioral and mental health





## HIGH LEVEL

Areas where patient acuity poses increased risk, areas where patients are alone or under minimal supervision, and areas where the risk has not yet been identified.

### EXAMPLES

- Seclusion rooms
- Patient bedrooms
- Patient toilet rooms and bathing facilities
- Emergency department (area under good supervision but dealing with unpredictable patients)
- Intake/interview rooms (where unknown patient acuity poses an increased risk)



## MODERATE-HIGH

Areas where patients interact with less direct supervision.

### EXAMPLES

- Activity spaces, group rooms, and treatment spaces
- Dining areas and recreation spaces, both indoor and outdoor
- Quiet rooms
- Patient-use laundry rooms



## MODERATE-LOW

Areas where patients are supervised and/or under direct observation.

### EXAMPLES

- Procedure rooms, exam/treatment rooms, and specialty therapy rooms (**Note:** exam/treatment rooms also may be considered higher risk depending on understanding of patient acuity)
- Counseling/consultation rooms
- Visitor rooms
- Corridors



## LOW

Staff services areas where patients are not allowed

### EXAMPLES

- Public lobby areas
- Waiting rooms (with direct supervision and observation of patients)
- Private offices
- Locked staff and support areas



## New sections

- **Geriatric Patient Care Unit**
- **Intensive Outpatient & Partial Hospitalization Program (IOP/PHP)**

## New requirements

- Transcranial Magnetic Stimulation **(TMS) room**
- Safety provision for entrances, reception and waiting spaces

# Behavioral and Mental Health



## Behavioral health crisis unit

This **dedicated emergency services unit** is designed to serve behavioral and mental health patients presenting in a state of crisis.

### Advantages

- ✓ Services and staffing can be **tailored to the needs** of this population
- ✓ Physical environment controlled to help **alleviate stressors** for patients and staff.



# emergency Psychiatric Assessment Treatment Healing

## **emPATH Units as a Solution for ED Psychiatric Patient Boarding**



Scott Zeller, MD

emPATH unit modeled on empathetic v. coercive care.

- Hospital-campus-based, near ED
- Open design: patients move about freely, choose activities, obtain comfort items without having to ask staff.
- Focuses on calming atmosphere which reduces stress, promotes therapeutic effects, and is always provided in a safe, supervised environment.
- There are no walls or glass 'fishbowl' between patients and staff: staff are always interspersed with patients, solving ligature issues.

# emPATH – What makes it different?

- Destination for all medically-cleared, crisis patients prior to disposition or IP admission; it's not alternative destination but **THE destination**.
- Designed and staffed to treat all emergency psychiatric patients – philosophy of “no exclusion”
- Immediate patient evaluation and treatment by a psychiatrist; constant observation and re-evaluation
- Wellness and recovery-oriented approach

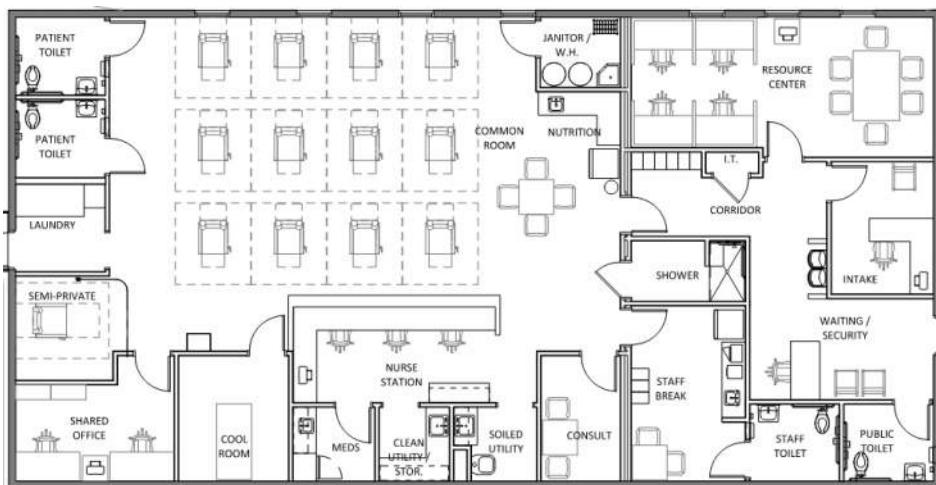


# Behavioral health crisis unit requirements

- Full independent unit including intake, nurse station, medication safety zone, consultation area, exam rooms, soiled, clean, nourishment, patient and staff toilets.
- Readily accessible to the emergency department
- Single-Patient Observation Room
  - Single patient room 100 sq. ft.
  - 10 ft. clear dimension
- Multiple-Patient Room
  - 80 sq. ft. per person (total open area)
  - 4' between recliners
  - 3' clearance from recliner to walls or partitions



# BHCU / emPATH – Sample floor plans



# Deep Dives

- Emergency department





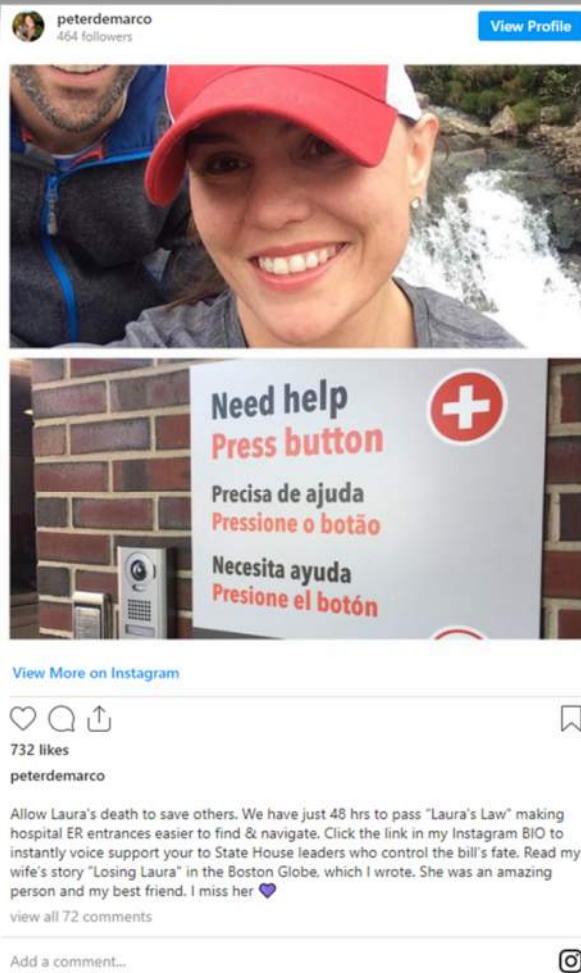
## Freestanding emergency care facilities

- Appeared in both Hospital and Outpatient in 2018 edition
- Located only in the Outpatient *Guidelines* in the 2022 edition




# Emergency care facilities

Requires **video surveillance** at public entrances to emergency facilities and a **duress alarm** where entrances may be locked.



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Allow Laura's death to save others. We have just 48 hrs to pass "Laura's Law" making hospital ER entrances easier to find & navigate. Click the link in my Instagram BIO to instantly voice support your to State House leaders who control the bill's fate. Read my wife's story "Losing Laura" in the Boston Globe, which I wrote. She was an amazing person and my best friend. I miss her ❤️

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## Husband successfully pushes for new law 4 years after wife's sudden death

Laura Levis died suddenly in 2016 after she unsuccessfully tried to enter CHA Somerville Hospital in Massachusetts and came up against a locked door.



Jan. 16, 2021, 12:51 PM EST / Source: TODAY  
By Ronnie Koenig

Sponsored Stories by Taboola

When not in use for a trauma patient, this room shall be **permitted to be:**

- **Subdivided** to provide multiple patient care stations
- **Used for individuals of size** providing it meets requirements for treatment room for individuals of size

## Trauma room

The physical space and operational plan **must accommodate quick conversion back** to a trauma room when needed, and each resulting patient care station must meet the requirements for the service to be provided.

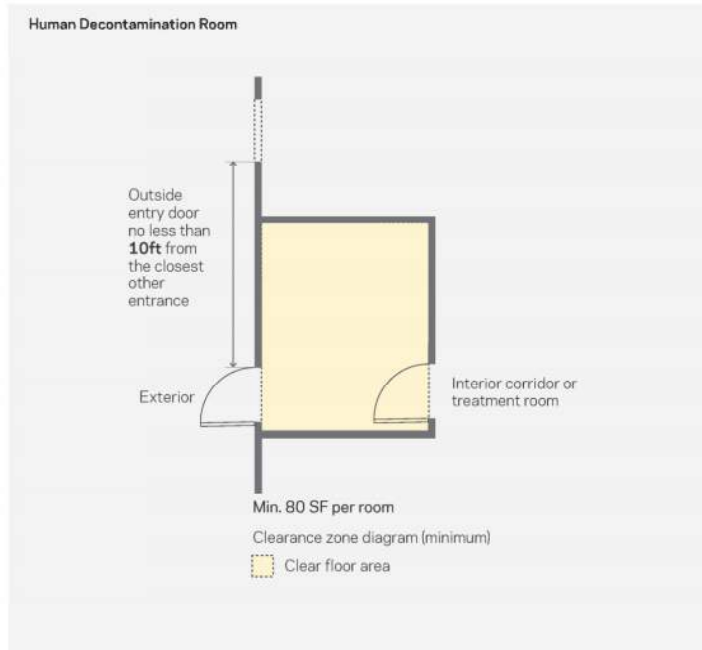


@ HOK

@ HOK

Sample Space Layout

Diagrams in this document represent sample layouts of the minimum requirements for room types and only, not mean the functional requirements for all projects.



Reference Guide	
CHAPTER	SECTION
2.2 Specific Requirements for General Hospitals	2.2-3.1.3.d (8) Human Decontamination Room

# Emergency decontamination

Revisions of significance:

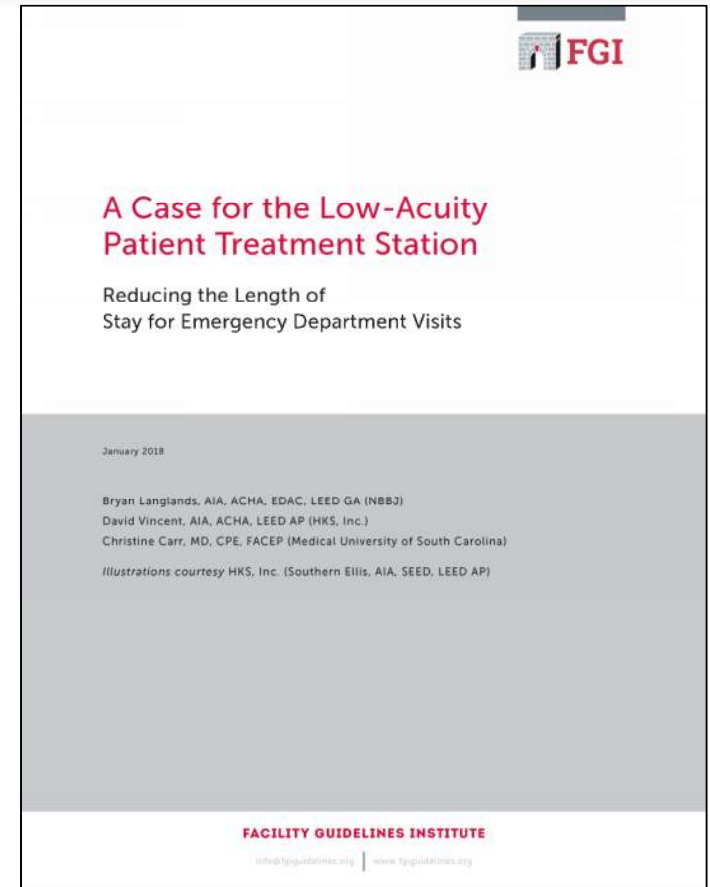
- Increased minimum size from ~~80 SF~~ to **100 SF**
- Shall be designed as a **wet location**
- Rinsate shall be prevented from leaving the room

Included are minimum requirements for Exterior Decontamination Structures, where provided.

# Low-acuity treatment area

***Low-acuity treatment area:** An area in an emergency department where patients with less urgent needs can be treated in bays or cubicles sized to accommodate a patient chair.*

***Note:** The low-acuity treatment area is not intended for use with a stretcher-gurney or bed, nor is it intended to replace the need for treatment rooms.*



# Emergency severity index

Patients generally not requiring horizontal care:

Emergency Severity Index (ESI) and physically able to sit in chair

Levels 4 & 5

Some portion of Level 3 (estimated at  $\leq 50\%$  of patients)

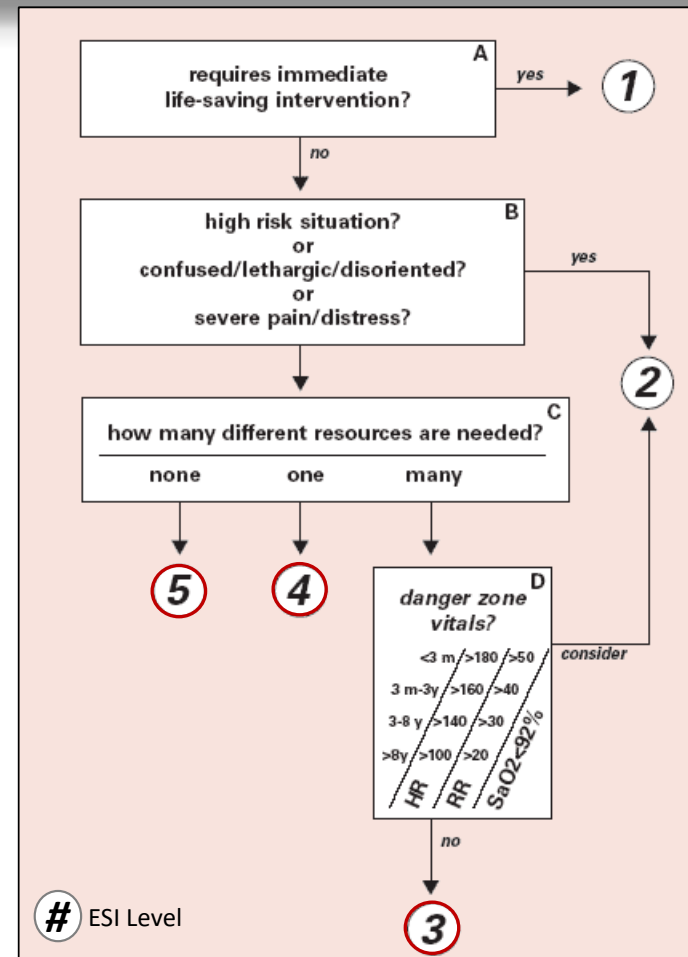
Results waiting

Flow RN/tech directs the patient by determining if the patient:

Needs resuscitation

Is disoriented or in severe distress

Is sick and need stretcher

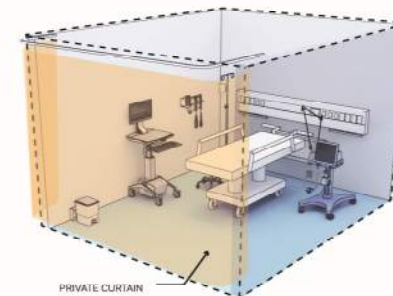
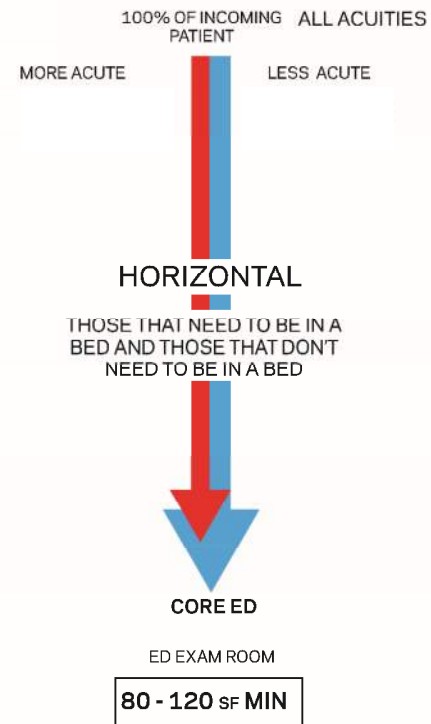


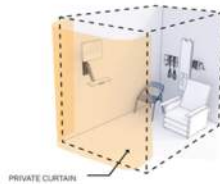
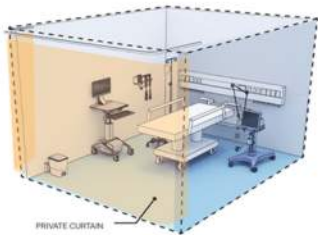
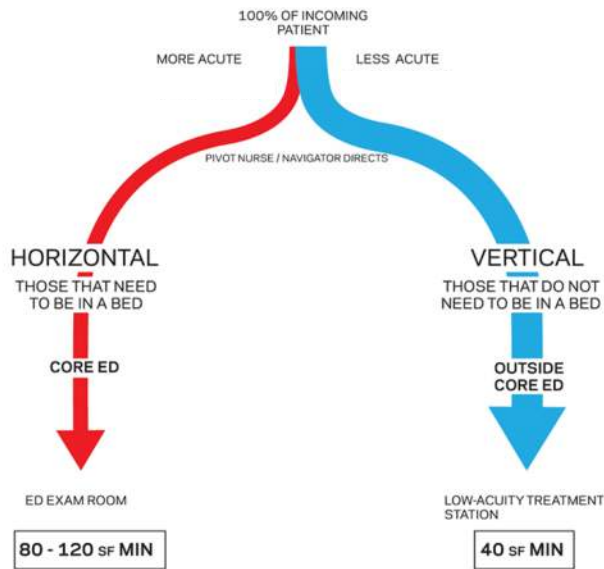
©ESI Triage Research Team, 2004.

# Current state

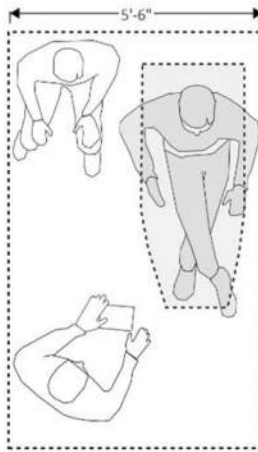
Aside from specialty rooms/areas (i.e., trauma, fast-track, individuals of size), there are two types of spaces for treatment of patients in the ED.

- Single-exam room at 120 SF CFA
- Bay or cubicle at 80 SF CFA

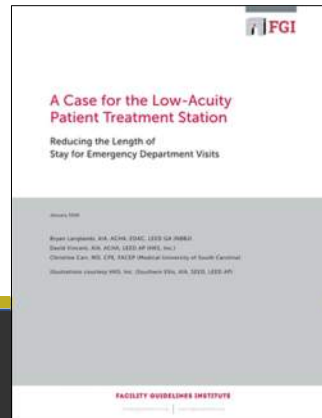




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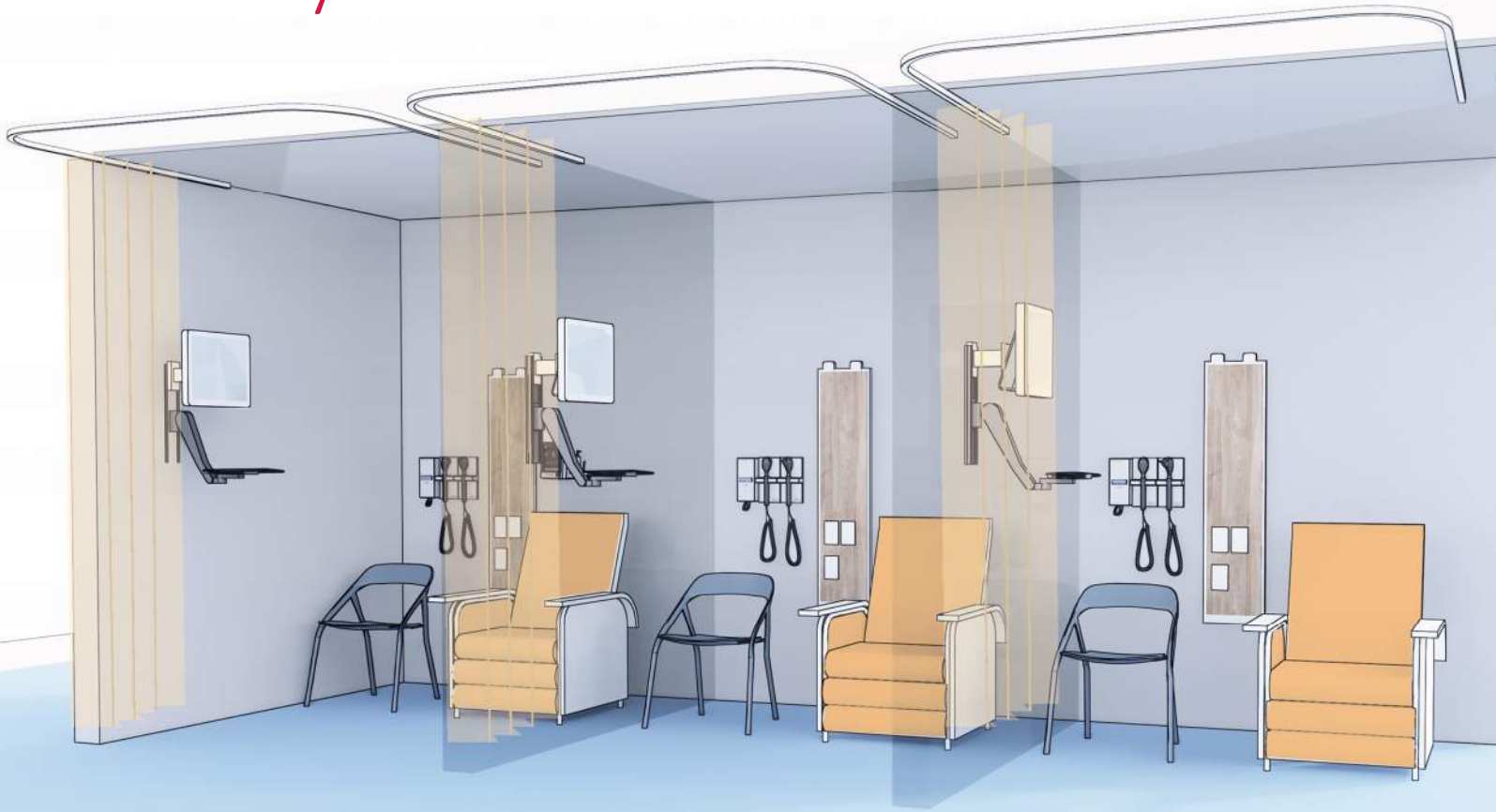


## Low-acuity spaces

### New Section

- **40 SF** minimum clear floor area
- **5' 6"** minimum clear dimension
- **3'** at the **side(s)**, **head**, or **foot** of the patient chair that corresponds with the care provider's expected work position(s)
- **Nurse call, 4 outlets, no gas**

# Low-acuity treatment area



© NBBJ



# ED rooms serving behavioral health patients

FGI *Guidelines* 2022 Edition now includes 4 types of spaces:

1. Secure Holding Room
2. Flexible Secure Treatment Room
3. Behavioral and Mental Health Treatment Room
4. Seclusion Room

\* **Safety risk assessment** shall determine the **types and number of rooms provided.**



# Secure holding room

*Temporarily hold patients in a secure environment until they are ready for treatment or transfer.*

**Where provided**, the secure holding room shall have:

- A minimum clear floor area of **60 square feet**
- **Minimum wall length of 7 feet**
- **Maximum wall length of 11 12 feet**
- **A minimum ceiling height of 9 feet**
- Readily accessible **Secure Holding Patient Toilet Room**

© Benjamin Benschneider

## Flexible secure treatment room

*Flexible use as a single-patient examination room and a secure holding room.*

**Where provided**, a secure treatment room shall meet the requirements of:

- **Secure holding room** Section 2.2-3.1.4.3 (2) and
- **Single-patient treatment room** Section 2.2-3.1.3.6 (2)

However:

- Handwashing station can be outside if adjacent
- Can have sinks, electrical outlets, medical gas outlet, etc. if you provide a means to cover them

# Behavioral and mental health treatment room

*Patients with less acute BH conditions who need medical treatment - or - higher BH acuity conditions under continuous direct observation.*

**Where provided,** a behavioral and mental health treatment room shall meet

- **Single-patient treatment room** Section 2.2-3.1.3.6 (2)
- Room features must be **tamper- and ligature-resistant**
- Room features must be **anti-weaponry design**
- **Locks shall be provided** on storage devices and cabinetry



## Seclusion room

*For patients requiring security and protection.*

*Intended for short-term occupancy.*

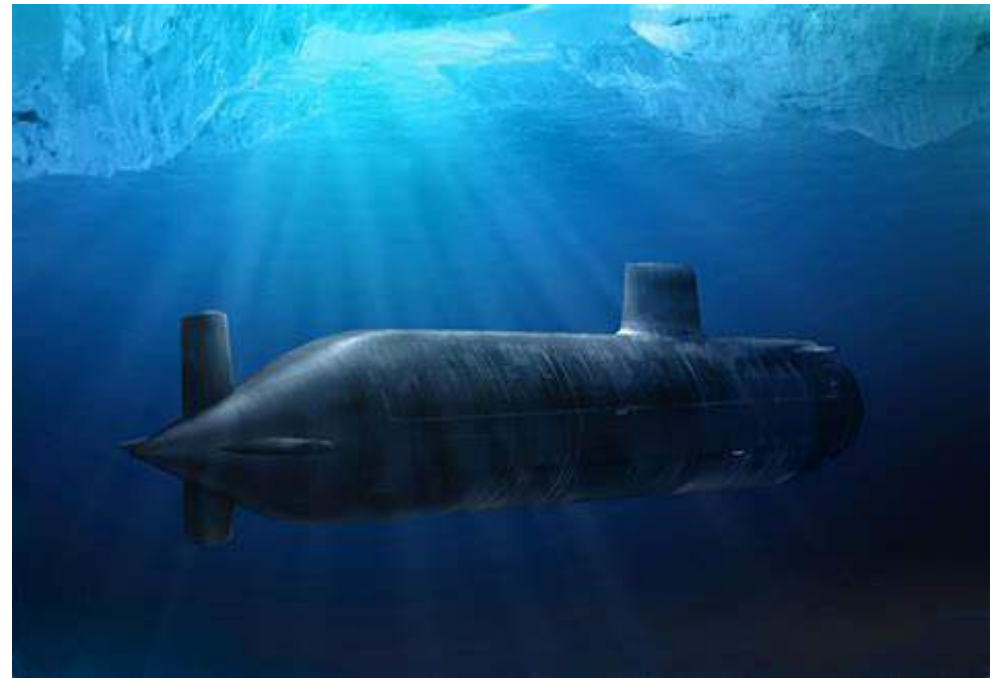
Where a seclusion is provided, it shall meet the requirements in Section 2.1-2.4.3 (Seclusion Room).

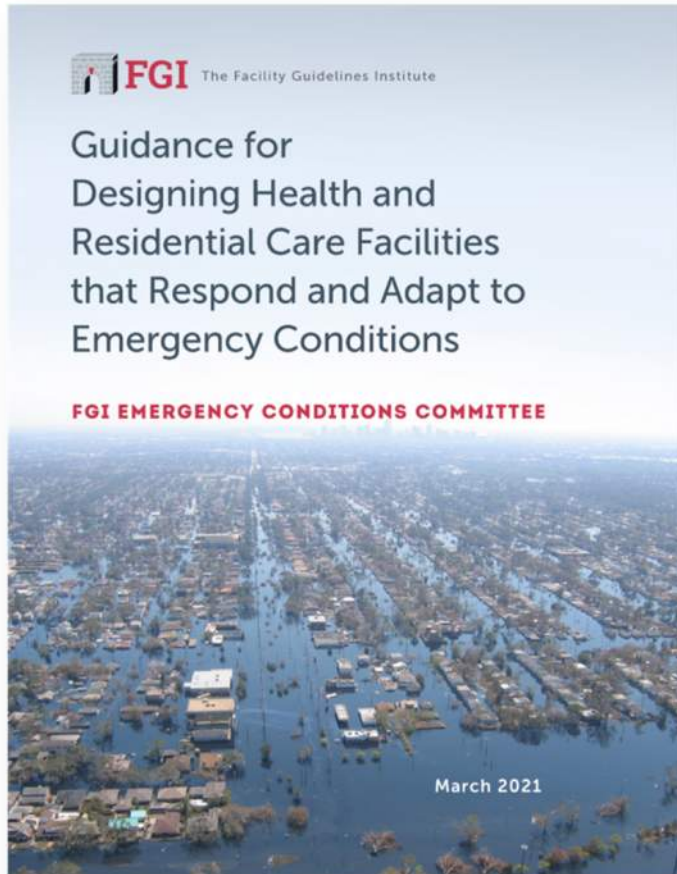


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# Deep Dives

- Emergency conditions



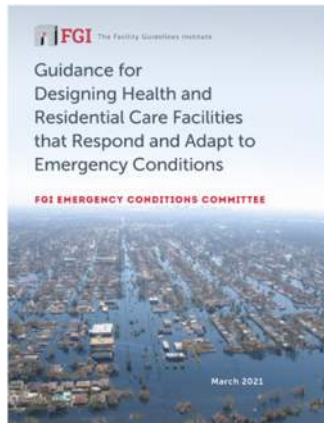


## Resources: Emergency Conditions Committee

### Sample Titles in the Emergency Conditions Library

- *FGI Releases Emergency Conditions Paper, Opens comment Period for Draft Emergency Conditions Guidelines*
- *AIA Releases Guidance on Identifying Alternate Sites for COVID-19 Pandemic*
- *ASHRAE Provides COVID-19 Ventilation Guidance*

- 1.2-4.1.2.8 Disaster, emergency, and vulnerability assessment
- **1.2-4.1.5.3 Generate solutions.** The SRA team shall document proposed solutions that mitigate risks from the identified hazards.
  - A1.2-4.1.5.3 In the context of disaster and emergency preparedness, the solutions should be integrated into the organization’s hazard vulnerability assessment.



## Safety Risk Assessment

- The process for developing a safety risk assessment (SRA) has been tweaked to add “generate solutions” to the two prior steps of “identify hazards” and “evaluate risks” from those hazards. The primary change in this section, however, is the addition of the disaster, emergency, and vulnerability assessment (DEVA) as part of the SRA.
- Built on the hazard vulnerability assessments many health care organizations already must perform, the DEVA was a result of the development of FGI’s 2021 white paper “Guidance for Designing Health and Residential Care Facilities that Respond and Adapt to Emergency Conditions” (posted at <https://fgiguideines.org>).



# Small Changes

- Memorable
- Big impacts





## Mobile Units

Revamped chapter

- Acknowledges the new classes of medical imaging
- Class 3 is built like a hospital.
- In 2022, section does not apply to units that stay less than 96 hours.

Plumbing: non-recirculated fixture  
branch piping: **10' max.**

Elevators: **Minimum door opening  
reduced: 54" to 48"**

WAGD systems

- **Where inhalation anesthesia used**
- Identified for OR, Class 3 imaging,  
and Cesarean delivery rooms (Table  
2.1-3)



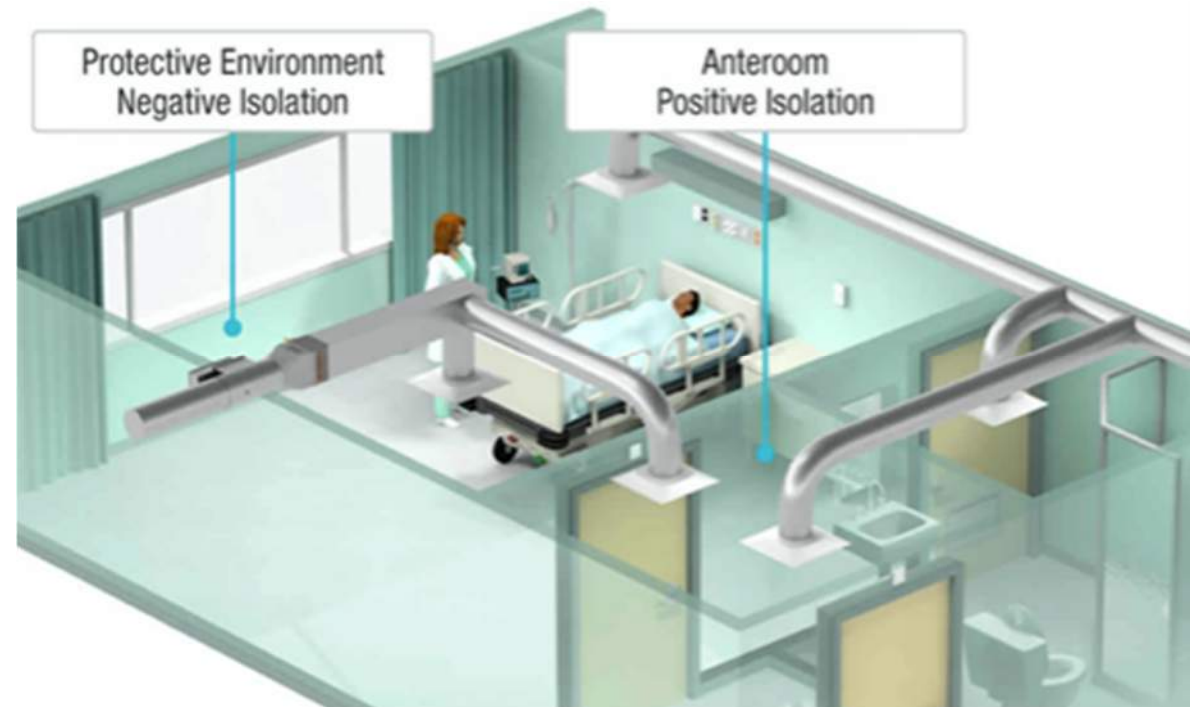
## All, Protective Environment(PE) & PE/AII Combination Rooms

- # required based on ICRA

## All Anterooms

- Not required
- To be determined by ICRA
- Space for doffing PPE required within anteroom

## Airborne Infection Isolation (AII) Rooms





## Diversity and Inclusive Environments

Prompts to consider the populations we serve.

- ADA
- Individuals of size
- Geriatric populations
- Behavioral/mental health

...and their barriers to access in the built environment

Hospitals with 35 or fewer licensed beds can use Critical Access or Small Hospital Chapter allowed

## Critical Access and Other Small Hospitals

- Increased flexibility in room use
- Universal care room
- Low-acuity treatment areas in the ED.



## Pre- and post-procedure patient care stations

- We can **combine pre- and post-Procedure areas**

- Flex between early and late census.

- The number pre/post procedure areas reduced from 2 to 1.5\*



© COMPLIANCE SIGNS

## Lactation Rooms

- Required for staff and volunteers.
- Recommended for visitors is recommended, however, public rooms must be separate



## Modular or prefabricated laminar flow ceiling systems allowed if:

- Seams / access doors gasketed
- Structurally rated assembly
- Access for ITM
- Diffuser meets ASHRAE 170
- Devices and related controls UL/ETL labeled

## Ceilings in restricted areas

- Monolithic
- Added Protective Environment

Rooms



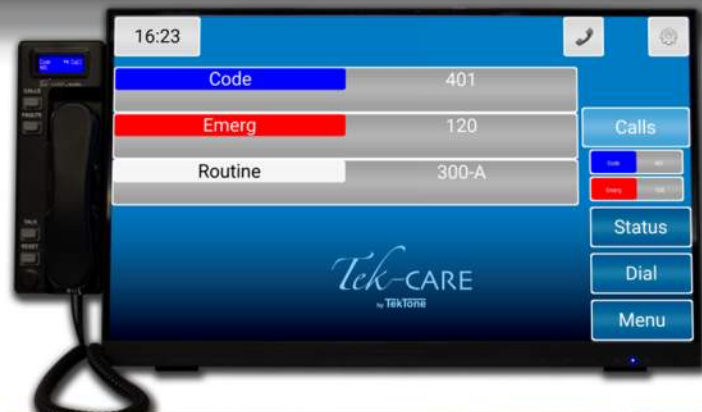
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- Diffuser meets ASHRAE 170
- Devices and related controls UL/ETL labeled

## Ceilings in restricted areas

- Monolithic
- Added Protective Environment Rooms





## Communication Systems

- The 2022 edition tables streamlined to feature **only required locations** not optional.
- **Staff assistance call stations deleted.**
- Modernized Telecom section
- **BH patient call stations** cords:
  - Detachable
  - <6 inches

## New Section in 2022

- Meet reqs of ICU & Protective Environment room
- Direct access to patient toilet room
- Radiant heat panels over bed
- Readily accessible to OR

## Burn Trauma Intensive Care Unit (ICU)



## New Section

- **153 SF** minimum clear floor area, includes
  - **33 SF** for family zone,
  - Provisions for overnight stay
  - **10'** at head wall
- 
- **Exception for renovation: 120 SF**

## Hospice patient care unit and hospice and/or palliative care rooms



Size increased

Multiple-infant rooms

- Minimum clear floor area **120** to **150 SF**

Single-infant rooms

- Minimum clear floor area **165** to **180 SF**

Windows not required if daylight can be viewed.

## Newborn Intensive Care Unit (NICU)

New room types:

Neonatal Couplet Care room

- Minimum clear floor area 300 SF
- 435 SF when combined with LDRP

NICU/PICU patient rooms for ECMO

- Minimum clear floor area 300 SF

## Meditation/Bereavement/Chapel

One per hospital...  
...not one per unit.



## Dual Entry Exam

- Minimum area of **100 SF**
- **Minimum clearance of 2'-8"** to avoid encroachment by both doors.

## Sexual Assault Forensic Exam (SAFE)

- A **private toilet with a shower**, plus storage for clothes, linen, and bathroom products. Also,
- **Lockable storage** for forensic collection kits is required.

# Guidelines

FOR DESIGN AND CONSTRUCTION OF  
**Outpatient Facilities**

The Facility Guidelines Institute

2018 edition



Includes ANSI/ASHRAE/ASHE  
Standard 170-2017:  
Ventilation of  
Health Care Facilities





## New section on hyperbaric oxygen therapy facilities

- Multiplace facilities
- Monoplace facilities
- Pre-procedure area
- Support areas for staff
- Support areas for patients





## Birth Centers

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- Size of a birthing center room has been reduced to 120 SF from 200 SF.



## Hemodialysis Treatment Area

- **Patient care station space requirements**
  - Removed min. clear floor areas
  - 2'-0" clearance at the foot of the dialysis chair when the chair is fully extended

## Contact Precaution room

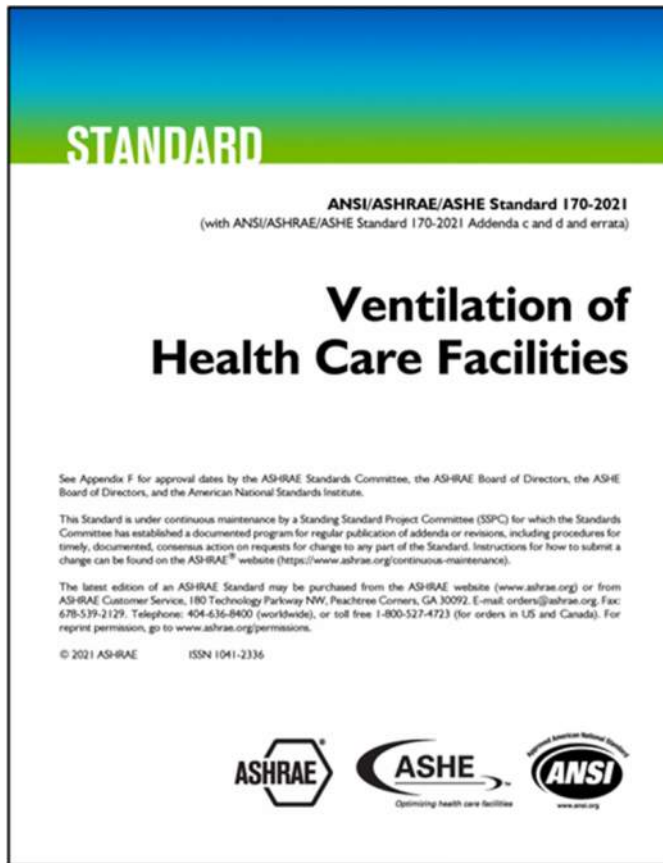
- removed All room
- Single-patient -min. **120 sq. ft.**
- **Direct observation** of patient's face AND insertion point
- **Hand-washing sink** in each room
- **Fluid disposal sink**
- Storage for PPE
- Door and walls need to extend to the floor—**but not the ceiling**





## Urgent Care Facility

- Must have one single patient exam room
- 5' clear aisles at cubicles independent of foot clearance.
- Shared nurse station spaces/reception and information area.
- Means to alert staff or local authorities.



-Included in the 2022 *Guidelines for* is the **2021 edition of Standard 170** dated November 2021, which incorporates **addenda c and d**.

#### ANSI/ASHRAE/ASHE Standard 170-2021, Venti

-  Addenda c to Standard 170-2021 (July 30, 2021)
-  Addendum d to Standard 170-2021 (October 29, 2021)
-  Addendum e to Standard 170-2021 (September 30, 2022)
-  Addendum f to Standard 170-2021 (July 5, 2022)
-  Addendum g to Standard 170-2021 (September 30, 2022)
-  Addendum h to Standard 170-2021 (September 30, 2022)

Go to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-addenda>