

APIC UBC Carpenters Hospital

ICRA Construction Rounding Simulation

APIC understands that faulty environment of care issues can lead to serious infection prevention and control issues. Any construction or renovation project at a healthcare facility can have infection implications.

The Association for Professionals in Infection Control and Epidemiology created the **APIC- UBC Carpenters Hospital--ICRA Construction Rounding Simulation**, an interactive experience designed to showcase the many issues surrounding construction, renovation and maintenance projects for a healthcare facility.

APIC created this Hospital with support from the Keystone Mountain Lakes Regional Council of Carpenters (KMLRCC) and the United Brotherhood of Carpenters (UBC).

Interactive ICRA Construction Rounding Simulation

This interactive exhibit at APIC 2019 will provide an innovative live educational opportunity for conference attendees to learn by viewing simulated hospital infection control risk assessment (ICRA) rounding for construction. Designed to be a fully interactive experience, attendees can walk through a simulated hospital hallway where renovation and maintenance projects are being completed.

In the simulation, a room will first be shown with various infection control infractions, followed by the same type of room with the infractions corrected. The handouts will include a rounding checklist for each room scenario, sample permits, and solutions to the infractions. These tools are intended to provide attendees with tools that can help them identify infractions in the simulated rooms, while preparing them to identify and correct infractions in their own facilities.

APIC-KMLRCC General Hospital can help attendees...

- Identify how minor maintenance issues can impact infection prevention.
- Explain the value of the infection control during construction program; and
- Showcase how input from IPs can result in an enhanced outcome or can help to prevent an adverse outcome in a construction or renovation project.

APIC UBC Carpenters Hospital Corridor

This simulated hospital corridor on the APIC 2019 Exhibit Hall show floor would have treatment and patient rooms. Each room represents a different ICRA scenario during a construction, renovation or maintenance project.

There would be three focus areas:

1. Outline policies and other documents used to develop a construction risk assessment as well as tools for monitoring a construction project.
2. Demonstrate means and methods in healthcare construction to create a comprehensive infection control plan.
3. Identify the complexities and life safety issues as related to patient safety while the construction project moves forward.

This will be achieved through a numbered checklist where the IP will identify and recognize positive and negative protocols in our mock hospital as it relates to:

- Dust control procedures and barriers
- Use of negative air pressure machines
- Hospital staff traffic flow
- Emergency egress routing
- Construction access and debris routes
- Monometer use and locations
- Particulate monitoring
- Ante room equipment and procedures
- Decommissioning mechanicals
- Use of personal protective equipment

APIC 2019 Exhibit Hall



Partnership

APIC is seeking suitable partners that can help support this brand new, unique experience for annual conference attendees.

All participants will be encouraged to enter the **APIC UBC Carpenters Hospital** and try to find the violations in each scenario. All scenario violations will be revealed in this space to the attendees. They will then see the correct methods in the next rooms. All participants will exit through an exit door.

Sponsorship of 1 scenario – Correct/Incorrect

As the exclusive sponsor of each scenario, you will receive:

- Logo and sponsorship acknowledgement on all marketing (website, onsite program, signage, and mobile app) of the APIC Hospital
- First right of refusal on your selected scenario supply donations or product placement.

Below are listed the ICRA scenarios that the **APIC UBC Carpenters Hospital** will showcase. These are currently in development and may change slightly.

Price: \$5,000 per scenario – BOTH the incorrect and correct procedures

ROOM # 100- Endoscopy **INCORRECT PROCEDURES** **3 VIOLATIONS**

CLASS: 1

SCENARIO: It's been years since the Endoscopy Dept. has had any aesthetic repairs completed. After multiple patient, and staff complaints this area has finally become available. Maintenance completed touching up paint, and is now repairing window treatments. Some of the window blinds are malfunctioning and may need replaced, while others only require a little maintenance.

This scenario takes place in an active patient area!

- Scenario will have multiple ceiling tiles left open. Worker will be accessing window blind housing from above and below ceiling, using rag to wipe away dust from components for examination, and then throw rag onto cart.
- Tool cart will be parked in front of Emergency exit.
- Worker will climb down ladder to get additional tools from cart, moving rag in process, and return to ceiling.
- Worker will continue to work on blinds from above and below, and return to cart to get rag.
- Continuously repeat this process while participants are traveling through APIC Hospital

VIOLATIONS

Cannot work in ceiling in CLASS I.

Multiple Ceilings tiles open

Tool cart left uncovered while unattended in patient area

Emergency Exit Blocked-(Life Safety Violation)

ROOM # 101- Endoscopy

CORRECT PROCEDURES

CLASS: 1

SCENARIO: It's been over years since the Endoscopy Dept. has had any aesthetic repairs completed. After multiple patient, and staff complaints this area is finally becoming available. Maintenance completed touching up paint, and is now repairing window treatments. Some of the window blinds are malfunctioning and may need replaced, while others only require a little maintenance.

This scenario takes place in an active patient area!

- Work on blinds from below ceiling.
- Tool cart kept away from exit door, and covered with vinyl covering

All work on blinds will be completed from below ceiling.

Ceiling tiles only opened for visual inspection.

Tool cart covered with vinyl cover

Emergency exit unobstructed

ROOM # 102- E.R **INCORRECT PROCEDURES** **6 VIOLATIONS**

CLASS: 2

SCENARIO: The E.R. Dept. is finally having the code compliant fire alarm devices installed, replacing the ones currently installed. The new devices are plug and play, and should fit onto the existing electrical boxes without much trouble, however an additional communication wire will need pulled to each device originating from the Fire Control Panel. Once wires are in place, walls will receive new paint before devices are installed.

This scenario takes place in an active patient area!

- Mock fire alarm control panel should be in “OFF” position.
- Alternate between wire pulling, painting, and electrical devices.
- Use puffer bottle to disperse particulates in to the air with roto-zip running.
- Alternate between 2 outlets, 1 under black light, and 1 **NOT** under black light.
- Open 1 ceiling tile at a time, and pull wire through ceiling, and fish down wall.
- Remove old device and toss it on bottom of tool cart

VIOLATIONS

No dust control in place utilizing power tools- (HEPA Machine, HEPA Filtered Vacuum)

No tacky mats

No Disinfectant Spray with rag

No mop with disinfectant

Not Storing Debris in covered container

Disarming Fire Alarm System- (Life Safety Violation)

ROOM # 103- E.R.

CORRECT PROCEDURES

CLASS: 2

SCENARIO: The E.R. Dept. has some in wall electrical devices malfunctioning due to a power surge. These devices will need replaced. New data wires will need pulled from the wire chase. Once wires are in place, walls will receive new paint before devices are installed.

This scenario takes place in an active patient area!

- Alternate between wire pulling, painting, and electrical devices jobs
 - Tape off diffuser, place tacky mat at door, have microfiber mop and disinfectant visible.
 - Use knife, and shop vac to capture dust from cutting walls.
 - Open 1 ceiling tile at a time.
 - Use rags to wipe down grid, use mop to clean floor.
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- **Dust control in place**
 - **HEPA filtered vacuum, tacky mats, rags, mops, and disinfectant spray**
 - **No dust generating power tools in use**
 - ***Fire Alarm System not de-activated***

ROOM # 104 Physical Therapy **INCORRECT PROCEDURES** **8 VIOLATIONS**

CLASS: 3

SCENARIO: The grouting of the brick outside the hospital is old, and has failed in some locations, allowing moisture to permeate behind the brick. The outside of the building has been re-pointed. Now that the water infiltration problem has been fixed, renovation can begin on the exterior wall. It's a small room, with a lot going on, space, and noise are always a concern.

- Park cart in corridor under fire pull station
- Worker should be in middle drywall demo pile, measuring wall, drawing lines on wall, and cutting studs with snips, and doing minor demo.
- Periodically go adjust channel on radio, cover garbage can with sheet, or tarp, and take can to dumpster, via the cafeteria.
- Periodically go out of room to get tools from cart.

Negative Air pressure too low- .003

Cart left outside of containment

Demo should be complete, and site cleaned up, prior to put back work starting

Debris not in container with tight fitting lid

Not using tacky mat when leaving space

Food wrappers, and lunch debris laying around space, chewing tobacco spit in track, and in spit bottles

Not following designated routes

Fire Pull Station Blocked-(Life Safety Violation)

ROOM # 105- Physical Therapy

CORRECT PROCEDURES

CLASS: 3

SCENARIO: The grouting of the brick outside the hospital is old, and has failed in some locations, allowing moisture to permeate behind the brick. The outside of the building has been re-pointed. Now that the water infiltration problem has been fixed, renovation can begin on the exterior wall. It's a small room, with a lot going on, space, and noise are always a concern.

Negative Air pressure between- .02 and .04

Cart kept inside of containment

Demo is complete, and site cleaned up, prior to repairs starting

Debris is in container with tight fitting lid

Using tacky mats when leaving space

No lunch garbage

Tobacco Free work site

Trash removed following the approved designated routes

Fire Pull Station kept clear of any obstructions

ROOM # 106- B.M.T. **INCORRECT PROCEDURES** **8 VIOLATIONS**

CLASS: 4

SCENARIO: Due to a water leak causing the floor tile to lift up, a review and investigation of the flooring and sub-flooring was launched. It was discovered that, in corridor 106 of, the lifting floor tiles were put in place over top of multiple layers of old flooring. It is because of these multiple layers and in the introduction of water, that mold has been able to grow in between the layers. Before construction can begin, the room must be decommissioned by maintenance, ICRA walls then can be built, and finally abatement. After abatement, the floor will need ground smooth to receive the new finish. Due to the impact noise and vibrations will have this work will take place overnight. The general contractor has agreed to this, but some of the direct hire subcontractors have scoffed at this notion.

- Encapsulate fire strobe inside Ante room
- Face floor fan exhaust air directly into participant corridor directly at O.R., from Ante room
- Worker will roll floor machine around, occasionally using spit bottle

Discharge air turbulent in corridor

Room not decommissioned- (*Sharps Box Left in room*)

No HEPA in Ante Room

Worker using tobacco products on site

Permit allows for night shift work only

No Negative in Construction- (*HEPA is scrubbing only*)

Ante room not properly set up:

No tacky mats

No PPE

No HEPA Vacuum

No Disinfectant spray w/ rags

Fire Strobe blocked by Ante room wall

ROOM # 107- BMT

CORRECT PROCEDURES

CLASS: 4

SCENARIO: Due to a water leak causing the floor tile to lift up, a review and investigation of the flooring and sub-flooring was launched. It was discovered that, in room 107, the lifting floor tiles were put in place over top of multiple layers of old flooring. It is because of these multiple layers and in the introduction of water, that mold has been able to grow in between the layers. Before construction can begin, the room must be decommissioned by maintenance, ICRA walls then can be built, and finally abatement. After abatement, the floor will need ground smooth to receive the new finish. Due to the impact noise and vibrations will have this work will take place overnight. The general contractor has agreed to this, but some of the direct hire subcontractors have scoffed at this notion.

Discharge air diffused in corridor

Room properly decommissioned

HEPA filtration in use in Ante Room

Tobacco free work place

No work being completed during the day

No Negative in Construction- (HEPA is scrubbing only)

Ante room not properly set up:

Tacky mats

PPE

HEPA Vacuum

Disinfectant spray with rags

Fire Strobe visible from all directions blocked by Ante room wall

ROOM # 108

CLASS: N/A

SCENARIO: This is the janitor closet. Construction periodically comes to get, or dump water

VIOLATIONS

Water puddle left on floor

Contaminated water left in hallway

Allowing access to hazardous Chemicals by not closing janitors closet

Worker leaves Wet floor sign in hallway

ROOM # 109

CLASS: N/A

SCENARIO: This is the Cafeteria

VIOLATIONS

Dirty workers utilizing cafeteria

ROOM # 110

CLASS: N/A

SCENARIO: This is the data closet for the floor. I.T. typically works in this closet, or brings in an outside contractor to work in this space as well.

VIOLATIONS

Workers leave loose wires lying on floor

Workers open multiple ceiling tiles to pull wires

Workers are too loud communicating to each other, (Yelling from inside of Data closet to worker in hallway)

Workers leave equipment in hallway when they go to lunch

ROOM # 111

CLASS: N/A

SCENARIO: This is the nurses' station

Violations:

Workers fraternizing with the clinical staff

Workers engage in conversation that violates HIPAA