Infection Control Risk Assessment (ICRA)
Healthcare Construction Tools for the I.P.
APIC Nebraska
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The health and safety of every patient, facility employee, and construction worker is our NUMBER ONE PRIORITY
To : 22333

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Once to join, then text your message.
Years of experience as an Infection Preventionist?

5 1 8 5 2
One word to best describe your field experience (hospital, nursing, long-term care, clinic, etc..)
What word best describes your working style?

proactive
The best word that describes your first Construction meeting.

ugh confused mare
crazynite terrifying unorganized
One word, your surveyor is riding the elevator with your contractor.
One word that defines "Plenum"

- dust
- smoke
- problem
- hazard
- dirty
- hvac
One word that describes "Staphylococcus aureus"

- lawsuit
- dirty
- scary
- contagious
- severe
- air-mate
Surveillance?

always, watching, monitoring, daily, watchdog, painful, audit, tedious, necessary, data, manual, endless, work, ugh, yuck, daya, pia.
What's your one-word goal for this session?
Thank You all for coming to the project kick-off meeting.

As project manager I've decided to not tell you the purpose of the project. That way it will be harder for you to sabotage it.

Does it require Infection Prevention measures?

Good Lord, NO we've been doing it this way as long as I've been here.
This 1-hour construction talk will discuss the importance of standard work practices and promote good communication throughout a construction project. We will discuss other potential risks associated with construction. This construction talk will focus on renovations and additions to occupied buildings.
Construction ICRA - Healthcare

- How healthcare environments are unique
- The value of performing an orientation training and taking security steps
- Describe hazards in healthcare construction and understand the importance of awareness
- Discuss the ICRA permit process
- Identify containments, including hard and soft wall barriers, and best use for HEPA machines
Healthcare facilities often provide a variety of services to long-term care residents and hospital patients. Often they perform as a self-contained community.

During construction, work typically has to be performed around communities of patients and staff. Patients may be at risk of exposure to hazards associated with construction, especially activities that generate dust.

UNIQUE ENVIRONMENT
Contaminants released into the environment during a construction project:

- Bacteria
- Fungi (3 things to grow food, moisture, air)
- Mold

Infectious agents live in reservoirs that are capable of transmitting disease.
Chain of Infection - Construction

- Mold
- Wall Cavity
- Demo
- Hands, Tools, Carts and Equipment
- Inhalation, Ingesting, Open Wound
- Immunocompromised
Orientation and Security

- Professionalism
- Break Areas
- Restricted Areas
- Safety Precautions
- Permits
- Emergency Phone Numbers
- Medical Codes
- Patient Privacy

Company Name

Name Lastname
Designation
ID: EMP98234211
Hazards in Healthcare Construction

- **Lead** – found in pipes in older buildings, paint, and forms of radiation protection.
- **Silica** – construction materials contain silica, for example: cement, gypsum board, and taping compound. A known carcinogen.
- **Asbestos** – found in fireproofing products, electrical and mechanical insulation.
Hazards in Healthcare Construction

Biohazards - medical waste generated by medical procedures, Sharps containers, bodily fluids, and tissue

Chemicals - bonding agents, solvents, cleaning agents, adhesives, and different finished materials
ICRA Permit
ICRA Permit - Step 1

Project Type

- **Type A** - inspection and noninvasive activities
- **Type B** - small scale, short duration activities that create minimal dust
- **Type C** - work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies
- **Type D** - major demolition and construction projects
ICRA Permit – Step 2

Patient Risk Group

- **Low Risk** – office space
- **Medium Risk** – respiratory therapy, physical therapy, endoscopy, etc.
- **High Risk** – Coronary care, E.D., laboratories, surgical units, etc.
- **Highest Risk** – any area caring for immuno-compromised patients
<table>
<thead>
<tr>
<th>Patient Risk Group</th>
<th>TYPE A</th>
<th>TYPE B</th>
<th>TYPE C</th>
<th>TYPE D</th>
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<tbody>
<tr>
<td>LOW Risk Group</td>
<td>I</td>
<td>II</td>
<td>II</td>
<td>III/IV</td>
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<tr>
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<td>I</td>
<td>II</td>
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<td>IV</td>
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<tr>
<td>HIGHEST Risk Group</td>
<td>II</td>
<td>III/IV</td>
<td>III/IV</td>
<td>IV</td>
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Note: Infection Control approval will be required when the Construction Activity and Risk Level indicate that Class III or Class IV control procedures are necessary.
Each class of work has predetermined precautions that must be followed by all personnel working on the project.
Step 4 Surrounding Project Area – potential impact to room surrounding
Step 5 Identify Specific Site – project is recorded in
Step 6 Related Issues – all issues related to the mechanical systems
Step 7 Containment Measures – need for containment and whether it needs to be a hard or soft wall

ICRA PERMIT – STEPS 4-7
Step 8 Potential Risk of Water Damage – possible risk of compromising the structural integrity
Step 9 Work Hours – actual time the work will be conducted
Step 10 – 13 Facility design – building codes and regulatory areas
Step 14 Placement of Containment – barrier to be used and the placement to be recorded

ICRA PERMIT – STEPS 8-14
Hard Wall System – a sturdy enclosure built to be in place for an extended period of time. It helps to protect patients from potential construction hazards. Required for Class 3 and Class 4 work.

ICRA CONTAINMENTS
Anterooms – a contained area that divides the work area from the clean patient occupied area. They help to provide additional protection in highly sensitive areas. Anterooms are an addition to your barrier system.

**HEPA machine** – separate negative air chamber
**HEPA vacuum** – to vacuum off before exiting
**PPA** – patient protective apparel

Walk off mats...
Soft Wall Systems – constructed of 4 to 6 mil fire-resistant polyethylene sheeting. Typically constructed for projects that last a short duration.

Portable Cube – typically single person containment, used for various scopes of work, HEPA machine for negative air.

ICRA CONTAINMENTS
Documentation – services recorded

Encapsulation – from the work area, transportation

ACH / CFMs – calculating for the proper size of machine to the volume of space
Baseline at start of project - helps to ensure the HEPA machine is controlling the contaminants in the air.

Documentation - a quick tool to help track contaminants in the event there is a breach in the barrier.

PARTICULATE COUNTER
Questions?
Request Additional Information Contact

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