Clinical Policy and Procedure

<table>
<thead>
<tr>
<th>Approved</th>
<th>Next Review</th>
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<tbody>
<tr>
<td>August 2018</td>
<td>August 2021</td>
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</table>

**Clinical Area:** Operating Room (OR), Post Anesthesia Care Unit (PACU) Phase I, Central Sterile Supply Department (CSSD), Endoscopy, Cardiac Cath Lab, Electrophysiology Lab, Interventional Radiology, Perinatal Services (those who attend deliveries), Outpatient Electroconvulsant Therapy, Support Services needing to enter restricted and semi-restricted areas (e.g., Pharmacy, Respiratory Care, Engineering)

**Population Covered:** All staff assigned to work in these areas, providers, vendors, visitors

**Campus:** Ballard, Cherry Hill, Edmonds, First Hill, Issaquah

**Implementation Date:** September 2001

**Related Procedures, Protocols, and Job Aids:**
- C-Sections in the OR: Visitors
- Decontamination Procedure
- Hand Hygiene: Hand Washing and Hand Antisepsis
- Personal Appearance
- Photo Identification Badges
- Sterile Field: Guidelines and Recommendations for Perioperative and Invasive Procedure Areas
- Traffic Patterns
- Vendors and Manufacturer Representative in Surgery and Invasive Procedure Areas
- Visitors, Observers, and Family Members in the Operating Room, Recovery Room, and Invasive Procedure Departments

**Purpose**

To provide evidence based contamination and infection practice guidelines for surgical attire in restricted/semi-restricted procedural areas

**Policy**

**NOTE:** These guidelines do not address additional sterile surgical attire requirements worn at the surgical field.

All staff and providers working in the restricted and semi-restricted procedure areas are required to wear hospital laundered scrubs. Hospital laundered scrubs account for appropriate water temperatures and cleaning practices, which cannot be assured with home laundering. Any home laundered article of clothing must be covered in the majority by a hospital laundered attire (e.g., round neck portion of t-shirts, long sleeve shirts, fleece vests) when within the restricted environment.

Any caregiver or provider who cannot meet expectations of this surgical attire policy must discuss with the manager of the affected department and consult with appropriate leaders such as Infection Prevention or Human Resources, to determine final requirements or accommodations.

Due to the cost of obtaining, cleaning, and assuring availability, caregivers are not to use hospital laundered scrubs if not required for role/job function. Hoarding of scrubs for personal or department use is not permitted so as to make available for end users.

Follow unit, campus, clinic, and /or system specific PPE policy/procedure/product modifications based on shortages or hospital command system (emergent) event.
**Responsible Persons**

All persons who enter into restricted and semi-restricted procedure areas.

**Equipment/Supplies**

- Hospital laundered scrub attire
- Single use head covers, masks and shoe covers
- Disposable cover bags for porous items that cannot be disinfected
- Disposable, single use jumpsuit

<table>
<thead>
<tr>
<th>Responsible Person</th>
<th>Steps</th>
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<tbody>
<tr>
<td>All persons who enter into restricted and semi-restricted procedure areas</td>
<td><strong>Body Covering / Scrubs:</strong></td>
</tr>
<tr>
<td></td>
<td>1. Donning clean hospital laundered surgical attire prior to entering semi-restricted and restricted areas required.</td>
</tr>
<tr>
<td></td>
<td>a. <strong>NOTE:</strong> If a person has gone outside the walls of the facility, one is required to don clean hospital laundered surgical attire before re-entering the semi-restricted and restricted areas. Use of a cover lab coat does not replace the need to don fresh hospital laundered surgical attire before re-entering the semi-restricted and restricted areas.</td>
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<tr>
<td></td>
<td>b. <strong>NOTE:</strong> If a person stays within the hospital (e.g., conference room or cafeteria), they is not required to change into new scrub attire upon re-entering the semi-restricted and restricted areas unless visibly soiled or wet.</td>
</tr>
<tr>
<td></td>
<td>c. Change visibly soiled or wet attire as soon as able.</td>
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<td></td>
<td>d. It is preferred that persons do not wear surgical attire outside the hospital as this raises concerns from the public about potential exposure to what may be affixed to the scrubs. In such case, either don personal attire or use a lab coat to cover the surgical attire.</td>
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<td>e. <strong>NOTE:</strong> Any home laundered article of clothing must be majorly covered by a hospital laundered or disposable attire (e.g., round neck portion of t-shirts are acceptable, tails/bottoms and long sleeves must be covered) when within the restricted environment. Because of the impracticality of having long sleeve hospital laundered jackets at the transition spaces between semi-restricted and restricted areas, long sleeve shirts must be majorly covered in semi-restricted areas as well.</td>
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<td></td>
<td>f. <strong>NOTE:</strong> While fleece jackets are not prohibited, they must either be removed or fully covered in a scrub jacket in semi-restricted and restricted areas, in addition to being laundered regularly.</td>
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<td>g. <strong>NOTE:</strong> Turtleneck shirts are prohibited since they cannot be majorly covered by hospital laundered or disposable attire.</td>
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<td>2. Short sleeves are acceptable in semi-restricted and restricted areas.</td>
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<td><strong>NOTE:</strong> Research has not shown a correlation with skin cells and surgical site infection. There is greater risk of cross contamination from baggy long-sleeves and jacket. Caregivers are to have a sterile consciousness when wearing baggy clothing.</td>
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<td>3. Surgical attire remains at the healthcare facility for laundering and is:</td>
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<tr>
<td></td>
<td>a. Changed daily and removed at the end of the shift, or</td>
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<tr>
<td></td>
<td>b. Changed when becomes visibly soiled or wet.</td>
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<tr>
<td>Head / Hair Covering (skull cap, bouffant, hood):</td>
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<tr>
<td>1. Wear a hospital laundered or disposable cap, bouffant, or hood to provide maximum containment of hair on the head and face.</td>
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<tr>
<td>a. A disposable skull cap may be solely worn when the substantial majority of hair is covered by it, with a limited amount of hair on the nape of the neck or modest sideburn remains uncovered.</td>
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<tr>
<td>b. Ears may be exposed to assist with hearing and comfort.</td>
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<tr>
<td>2. Visitors, vendors, and Ancillary Personnel use a red-colored disposable bouffant for ease of identification and monitoring.</td>
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<tr>
<td>3. Hospital laundered or reusable head coverings are:</td>
<td></td>
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<tr>
<td>a. Changed daily and removed at the end of the shift, or</td>
<td></td>
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<tr>
<td>b. Changed when visibly soiled, as soon as possible during/after a procedure.</td>
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**NOTE:** Home laundered head coverings are not permitted as the sole hair covering in restricted areas due to inability to assure proper water temperature and cleaning procedures. If home laundered head coverings are used, they must be covered by a disposable bouffant or hood within the restricted areas. Home laundered head coverings are permitted as the sole hair covering in semi-restricted areas. Home laundered head coverings should only be worn once and then laundered.

<table>
<thead>
<tr>
<th>Surgical Masks:</th>
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<tbody>
<tr>
<td>1. Cover the mouth and nose by securing a seal to prevent venting.</td>
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<tr>
<td>2. Change masks between procedures and when soiled.</td>
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**NOTE:** The filter portion of a surgical mask harbors bacteria collected from the nasopharyngeal airway. The contaminated mask may cross-contaminate the scrub attire when the mask is left hanging around the neck or placed in pockets. |
| 3. Remove the mask prior to leaving the semi-restricted (if worn) or restricted procedure areas. |

**NOTE:** Follow influenza masking requirements for best practices in facial covering when outside restricted and semi-restricted procedure areas. |
| 4. Follow *facial hair guidelines* for best practices in facial hair covering. (e.g., masks are not to be worn dangling at any time.) |

**NOTE:** In the restricted area, facial hair must be covered in totality.
| All persons who enter into restricted and semi-restricted procedure areas | **Eye Protection:**

1. Protective eyewear or face shields should be worn by personnel who are at the sterile field, or anywhere that splashing, spraying or exposure to body fluids may occur. Hospital-provided options are available on all units.

**NOTE:** If in one’s professional, risk-based opinion wearing OSHA approved PPE would hinder performance and efficiency in the OR/treatment field, then provider/caregivers may choose to wear prescription glasses/lenses knowing it may not provide adequate protection.

| All persons who enter into restricted and semi-restricted procedure areas | **Shoes / Booties:**

1. Shoes worn within the restricted or semi restricted areas are clean, slip resistant, and in good repair, providing protection from spilled liquids and sharp objects.
   a. Shoes with closed toes, non-perforated top and sturdy soles are required.
   b. It is recommended that personnel working in the OR/procedural areas have dedicated work shoes.

2. Since the floor is considered “dirty”, shoe covers are not required.
   a. Shoe covers may be worn when there is anticipation of contamination with blood and/or fluids.
   b. Shoe covers are removed before leaving the perioperative area.
   c. Any person may be requested to don shoe covers if shoes are visibly dirty.

| All persons who enter into restricted and semi-restricted procedure areas | **Jewelry:**

1. All jewelry (necklaces, bracelets and watches) are to be modest, unobtrusive, clean and secured.
   a. **NOTE:** Jewelry needs to be of wipeable/cleanable material (e.g., no leather or cloth).

2. Personnel in the operative field areas should have all jewelry removed or secured (i.e. taped/strapped) and confined within the scrub attire [i.e., head cover, gown, or mask].
   a. **NOTE:** Rings must be removed by all personnel scrubbed at the operative field.

3. Follow HR *Personal Appearance* policy and for Issaquah campus staff *Personal Appearance: Swedish Issaquah*.

| All persons who enter into restricted and semi-restricted procedure areas | **ID Badges:**

1. Personnel may tuck photo identification badges into pockets or attire to prevent dangling and potential contamination issues.

2. Personnel should present photo identification when introducing self to new patients and other customers.

3. Vendors are required to follow *proper identification* via Reptrax.

4. Visitors are required to have visible visitor badge.

| All persons who enter into restricted and semi-restricted procedure areas | **Fingernails:**

1. Fingernails are kept short (1/4 inch), clean, and healthy. Nails must remain well-manicured with no chips or appliqués.
| restricted and semi-restricted procedure areas | NOTE: Artificial nails or extenders are not permitted. Nail shellac and polish are permitted as long as intact.  
| | a. Remove debris from under fingernails with a plastic single-use nail cleaner.  
| | b. Clean fingernails under running water with nail cleaner.  
| All persons who enter into restricted and semi-restricted procedure areas | Personal items:  
| | 1. Personal items are cleaned with antibacterial wipes before bringing into restricted or semi-restricted areas:  
| | a. Pagers and electronic devices are cleaned periodically and when soiled.  
| | 2. Non-wipeable personal items (e.g., fanny packs, backpacks, briefcases or other bags) are placed in a plastic bag prior to entering the restricted or semi-restricted areas.  
| | 3. Personal items are kept away from the surgical field (at least three feet) and are not stored on the floor.  
| All persons who enter into restricted and semi-restricted procedure areas | Vendors / Visitors / Ancillary Personnel:  
| | 1. All vendors, visitors and ancillary personnel entering the restricted or semi-restricted area don hospital laundered scrubs or a disposable jumpsuit.  
| | 2. Vendors, visitors and ancillary personnel who will be in semi-restricted areas (hallways and supply rooms) may wear a jumpsuit designed to completely cover outside apparel, i.e., Facilities worker.  
| | 3. Visitors in jumpsuits only enter the restricted areas (operating room) during a procedure when necessary, and for short periods, usually less than 30 minutes.  
| | a. Examples of short-term visits: A parent accompanying a child into the OR  
| | b. Pathologists picking up specimens in the OR  
| | c. Designated support person for cesarean sections  
| | 4. Those accompanying the laboring patient may stay in jumpsuits for the duration of the operative delivery.  
| | 5. When longer time is needed during a procedure, visitors are required to don surgical scrubs, i.e. interpreters who will remain in the operating room for the entire procedure.  
| | 6. Vendors, visitors, and Ancillary Personnel are required to wear red-colored bouffant head coverings and vendor/visitor name badge for identification and ease of monitoring.  

**Definitions**

*Hospital provided, hospital laundered scrubs.* Pants, top and warm-up jackets that are intended for use within designated areas and are purchased maintained and laundered by the hospital. The hospital laundry meets industry standards for processing textiles, including the mechanical thermal and chemical components necessary to achieve a reduction in antimicrobial levels in soiled attire, and has textile quality control procedures in place.

*Restricted area* (operating and procedure rooms, the clean core and active scrub sink areas). To enter these areas it is required to cross the red line demarcation into the semi-restricted area and then into the restricted area.

*Semi-restricted area* (peripheral support areas of the surgical suite, storage areas for clean and sterile supplies, work areas for processing and storage of instrumentation, corridors leading to restricted areas, inactive scrub sink area, procedural control rooms). Traffic in this area is limited to authorized personnel only, with a requirement for surgical attire and covering of all head hair are required. The semi-restricted areas are divided from the unrestricted areas by red demarcation lines on the floor.
Unrestricted area (offices, lounges, patient transfer areas, post-anesthesia care unit). There are no clothing restrictions; patients, family members/significant others, physicians or staff may enter these areas for temporary business in street clothes.

Majority covered or majorly covered. Refers to an item being covered with required surgical attire and no more than an inch of the item not covered by required surgical attire (i.e. any home laundered article of clothing must be covered in the majority by a hospital laundered attire when within the restricted environment).

Supplemental Information

Numerous risk factors have been identified as potentially contributing to the development of surgical site infection (SSI). Not all risk factors have (strong) correlations to SSI, but collectively they are important to control and/or implement to reduce or prevent SSI. Surgical attire is but one aspect of a risk factor.

The risk factors include:

- Intrinsic (Patient) factors which may be modifiable (e.g., obesity, smoker) or non-modifiable (e.g., age, health history)
- Extrinsic (procedure related) such as emergency, complexity, and higher wound classification
- Facility such as ventilation, room traffic, environmental surfaces, equipment and supplies
- Pre-hospital interventions such as bathing/showering and bowel preparation
- Preoperative such as pre-existing infection, skin preparation, and glycemic control
- Intraoperative such as procedure duration, antibiotic dosing, and surgical hand antisepsis

Regulatory Requirement

WAC 246-320-176 – Infection Control Program.

Centers for Medicare & Medicaid Services (CMS). 482.42 – Infection Control.

Addenda

Chart for Surgical Attire in Semi-Restricted,Restricted, and Operative Field Areas
Facial Hair Guidelines
Surgical Attire Audit Tool

References


Clinical Policy/Procedure: SURGICAL ATTIRE: ATTIRE FOR RESTRICTED AND SEMI-RESTRICTED PROCEDURE AREAS

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Berrios-Torres, SI et al.. Centers for Disease Control and Prevention Guidline for the Prevention of Surgical Site Infection, 2017. JAMA Surgery 52 (8), 784-791.


Farach, Sandra M. et al., Have Recent Modifications of Operating Room Attire Policies Decreased Surgical Site Infections? An American College of Surgeons NSQIP Review of 6,517 Patients, Journal of the American College of Surgeons, Volume 0 , Issue 0 [Article in Press]


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infection in clean surgery.


STAKEHOLDERS

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Sue Warner-Murray, RN, MSN, CNOR, ACNS-BC, CNS-CP, Perioperative Clinical Nurse Specialist

Expert Consultants

Attire Task Force, May 2018 and January 2020 (Surgeon, Surgical Services, Infection Prevention, Accreditation, Injury Management)
Medical Executive Committee (First Hill/Ballard/Cherry Hill/Issaquah) 6/27/2018
Medical Executive Committee Edmonds 6/7/2018
Perioperative Leadership 5/24/2018
Surgical Quality Committee 6/8/2018

Sponsor

Marc Horton, MD Chief of Surgery

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Addendum

Surgical Attire in Semi-Restricted, Restricted, and Operative Field Areas

(\(x\) = yes it is to be worn in this area)

<table>
<thead>
<tr>
<th></th>
<th>Semi-Restricted</th>
<th>Restricted</th>
<th>Operative Field Areas</th>
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<tbody>
<tr>
<td><strong>Clean hospital laundered</strong></td>
<td>e.g., over the red line; hallway, inactive scrub sink</td>
<td>e.g., over the red line; active scrub sink; OR/ procedure room; preparing the sterile field</td>
<td>e.g., receiving the sterile equipment and supplies; setting the table; draped operative/ procedural field</td>
</tr>
<tr>
<td>Surgical attire covering the majority of any home laundered clothing underneath</td>
<td>(x) (e.g., PACU wears scrubs in case they need to enter OR hallways [semi-restricted] to obtain blood/help with code; cover home laundered long sleeves/tails with scrub jacket)</td>
<td>(x)</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Short sleeves surgical attire</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>X and covered by sterile gown</td>
</tr>
<tr>
<td><strong>Disposable jumpsuits</strong></td>
<td>(x)</td>
<td>X and Limited to 30 minutes except those accompanying laboring patients wear for duration of operative delivery</td>
<td>Not Allowed</td>
</tr>
<tr>
<td><strong>Home-laundered cap, bouffant, or hood</strong></td>
<td>(x)</td>
<td>Home-laundered caps must be covered with disposable cap</td>
<td>Home-laundered caps must be covered with disposable cap</td>
</tr>
<tr>
<td><strong>Hospital laundered or disposable cap, bouffant, or hood</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Mask</strong></td>
<td>worn if procedures at risk for exposure</td>
<td>(x)</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Eye protection</strong></td>
<td>wear if procedures at risk for splash</td>
<td>wear if procedures at risk for splash</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Closed toes, non-perforated top, slip-resistant, and sturdy (non-slip) shoes</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Modest, unobtrusive, and secured in place jewelry</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>Secured and confined within scrub attire or removed</td>
</tr>
<tr>
<td><strong>Identification badge</strong></td>
<td>(x)</td>
<td>may tuck photo identification badges into pockets or attire to prevent dangling and potential contamination issues</td>
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<td><strong>Fingernails kept short, (1/4 inch) clean, and healthy; well-manicured with no chips or appliqués; intact shellac or polish</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>(x)</td>
</tr>
<tr>
<td><strong>Cleanable/wipeable personable items</strong></td>
<td>(x)</td>
<td>(x)</td>
<td>Not allowed</td>
</tr>
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