PURPOSE:

A. To prevent the transmission of infectious agents within the medical center and ambulatory care centers. The type of isolation precautions indicated will be based on the pathogen, known mode of transmission, susceptibility of host and clinical syndrome.

B. To prevent exposure between potentially pathogenic microorganisms and uninfected patients, visitors, and health care workers.

POLICY:

It is the policy of Cook Children’s Medical Center to isolate patients assessed to have communicable diseases whether diagnosed or being considered. Isolation precautions for patients with specific diseases are used in addition to Standard/Universal Precautions. Patients may be in more than one category of isolation at the same time. Patients in isolation are not allowed out of their room except for procedures and under special circumstances described on page 9.

A. The receiving nurse is responsible for placing the patient in isolation according to this policy and educating the patient and/or family.

B. The charge nurse/patient nurse is responsible for initiating and maintaining proper isolation techniques as determined by this policy.
C. If there is a disagreement between the physician and hospital policy regarding patient isolation or infection control policies, the Hospital Epidemiologist should be notified to make the final decision.

D. All personnel having contact with isolated patients are responsible for complying with hospital and departmental isolation policies.

E. The Infection Control Staff is responsible for maintaining records on all patients with infectious and contagious diseases. The Infection Control Staff acts as a consultant on isolation procedures and techniques and updates these as necessary. He/She is responsible for contacting the local health department regarding reportable diseases.

F. The Hospital Epidemiologist, nursing staff, and the Infection Control Staff have the authority to initiate and discontinue isolation without an attending physician’s order.

G. Isolation protocols for SARS, Smallpox, Avian Flu, pandemic flu and selected pathogens for bioterrorism are described in the Infection Control Guidelines for Emerging Infections Related to Bioterrorism (IC 110) and Emergency Management Plan for Highly Communicable Respiratory Viruses (IC 275).

PROCEDURE:

INITIATING ISOLATION STATUS:

A. Room Accommodations

1. Most patients admitted to the medical center are assigned a bed through the nursing supervisor/bed control. The patient’s diagnoses and laboratory tests are taken into consideration to determine isolation needs and bed requirements.

2. Patients with conditions requiring isolation will be placed in a private room. A patient in AIRBORNE or Strict isolation must be placed in a negative pressure room with the door closed. Negative pressure rooms are listed below:

   a. 3 South - 3106, 3107, 3108, 3109;

   b. 4 North - 4206P, 4207P, 4208P, 4209P;

   c. 4 South - 4306P, 4307P, 4308P, 4309P;

   d. 5 South - 5306P, 5307P, 5308P, 5309P;

   e. 5 North - 5406P, 5407P, 5408P, 5409P;

   f. 3 PAV - P307, P308, P309, P310;

   g. 4 PAV – P407, P408, P409, P410;

   h. 5 PAV – P507, P508;
i. PICU 2806, 2807;

j. NICU Rooms 1, 2, 2242, 2243;

k. Emergency Room - Four isolation rooms;

3. Patients with non-communicable diseases may be placed in negative pressure rooms. Severely immunocompromised patients should not be placed in negative pressure rooms unless infected with Varicella, pulmonary tuberculosis, or other highly communicable airborne organisms. A portable Hepa filter may be placed in the room to protect the patient from incoming air.

4. Only patients with the exact same microbiologic diagnosis may be cohorted in the same room. Siblings may be cohorted. Personnel protective equipment (PPE) are to be changed between patients in the same room.

B. When a patient is admitted with, or his diagnosis is changed, to a communicable disease, the charge nurse will initiate isolation precautions.

C. The nursing staff will place the isolation notice on the patient's room door, and in the isolation anteroom, noting needed precautions. Notation will be made on the patient's kardex of the date and type of precaution initiated and any special instructions as given by infection control.

D. The charge nurse or designee will update the OE Patient Data Profile with the appropriate Isolation Code.

E. The nurse will obtain from the supply cart appropriate isolation supplies, which may include gowns, gloves, masks, and alcohol gel, these items are to be placed in the isolation anteroom or on a cart outside the door if anteroom is unavailable. A disposable thermometer, blood pressure cuff, and stethoscope is to be placed in the room for patients in Strict, Contact, or Drainage/Secretion isolation.

F. From the floor stock supply the following items are to be obtained:

1. Linen bags with the biohazard label for linen (double bagging is not necessary). If the patient is in a private room, these supplies should be placed on a cart and kept outside the patient's room.

2. Disinfectant should be readily available to clean/disinfect reusable items brought into patients room.

G. The nurse shall explain the purpose and the procedure for isolation to the family and inform the family that (except caretaker) visitors should be limited while the patient is isolated. Toys and personal items that are brought into the room should be easily washable or disposable. Patient/parent education of isolation procedures should be documented on the appropriate documentation record.

H. The nurse shall document in the staffing acuity assessment the type of isolation in place.
PERSONNEL PROTECTIVE EQUIPMENT (PPE)

PPE refers to a variety of barriers and respirators used alone or in combination to protect mucous membranes, airways, skin, and clothing from contact with infectious agents. The selection of PPE is based on the nature of the patient interaction and/or the likely mode(s) of transmission.

A. Isolation Gowns
Isolation gowns are used to protect the healthcare worker’s (HCW) arms and exposed body areas and prevent contamination of clothing with potentially infectious agents. Isolation gowns are always worn in combination with gloves, and with other PPE when indicated. Gowns are usually the first piece of PPE to be donned. Full coverage of the arms and body front, from neck to the mid-thigh or below will ensure that clothing and exposed upper body areas are protected.

B. Isolation Masks
Masks are used for three primary purposes in healthcare settings:
1. Placed on healthcare personnel to protect them from contact with infectious material from patients e.g., respiratory secretions and sprays of blood or body fluids;
2. Placed on healthcare personnel when engaged in procedures requiring sterile technique to protect patients from exposure to infectious agents carried in a healthcare worker’s mouth or nose;
3. Placed on coughing patients to limit potential dissemination of infectious respiratory secretions from the patient to others (i.e., Respiratory Hygiene/Cough Etiquette).

Isolation masks should not be confused with particulate respirators (N-95) that are used to prevent inhalation of small particles that may contain infectious agents transmitted via the airborne route.

C. Gloves
Gloves are used to prevent contamination of HCW’s hands when;
1. Anticipating direct contact with blood or body fluids, mucous membranes, nonintact skin and other potentially infectious material;
2. Having direct contact with patients who are colonized or infected with pathogens transmitted by the contact route e.g., VRE, MRSA, RSV;
3. Handling or touching visibly or potentially contaminated patient care equipment and environmental surfaces.

Gloves can protect both patients and healthcare personnel from exposure to infectious material that may be carried on hands. When gloves are worn in combination with other PPE, they are put on last. Gloves that fit snugly around the wrist are preferred for use with an isolation gown because they will cover the gown cuff and provide a more reliable continuous barrier for the arms, wrists, and hands. Gloves that are removed properly will prevent hand contamination.
Hand hygiene following glove removal further ensures that the hands will not carry potentially infectious material that might have penetrated through unrecognized tears or that could contaminate the hands during glove removal.

ENTERING AND LEAVING ISOLATION ROOM

A. Persons entering the room shall read isolation sign and determine what PPE (gowns, mask, gloves, etc.) is necessary to enter room. These items are disposable and are to be worn only once. If unsure, persons are to check with the charge nurse as to what precautions to take.

B. Refer to Attachment A for donning and removal of PPE sequences.

C. Be sure room is entered with all necessary equipment to provide patient care. Should it be necessary to obtain equipment once inside the room, call on the intercom for someone to bring what is needed. Never leave the room with isolation apparel on.

DISCONTINUATION OF ISOLATION

Isolation is discontinued, when appropriate, if the patient is no longer contagious, not shedding pathogens or after appropriate therapy.

ADMINISTRATION OF MEDICINE

All medications and supplies needed for administration to patients in isolation will be disposable and disposed in appropriate containers in patient room.

EQUIPMENT/SUPPLIES

A. When possible, dedicate the use of non-critical patient care equipment to a single patient.

B. Handle all other equipment according to Standard/Universal Precautions.

C. All disposable supplies or items that cannot be cleaned must be discarded when the patient is discharged from the room.

D. All equipment should be thoroughly cleaned and disinfected.

PATIENT TRANSPORT

A. Transport of isolation patients should be limited to essential purposes, such as diagnostic and therapeutic procedures that cannot be performed in the patient’s room.

B. When transport is necessary appropriate barriers should be used on the patient (e.g., mask, wrapping in sheets or use of impervious dressings to cover the affected area(s) when infectious skin lesions or drainage are present. Transport personnel should wear appropriate PPE if having direct patient contact or touching contaminated surfaces.
C. The receiving department should be notified regarding patient isolation status to ensure appropriate isolation in maintained.

D. Equipment used for transported is to be cleaned/disinfected after use.

**USE OF ISOLATION IN SPECIAL CARE AREAS**

Patient care will not be compromised because of isolation requirements.

Patients requiring isolation (except for specific diseases listed in infection control policies) may be cared for in the Special Care Areas. These patients should be placed in the isolation rooms in the TCU, NICU and PICU. Normal isolation procedures should be followed in providing care for these patients.

**FAMILY/VISITORS**

A. Visitors should be limited for the patient in isolation. Children (except siblings) are not to visit patients in isolation.

B. Family/Visitors are not to go from an isolation room to other patient rooms.

C. Family/Visitors should be instructed on hand hygiene by nursing staff.

D. Sibling visitors of isolated patients are not allowed in the playroom and must stay in the patient room.

**OUT PATIENTS REQUIRING ISOLATION:**

A. Surgical Suite/Post Anesthesia Care Unit

Surgery will routinely review the patient profile for isolation information on all surgeries and document the information on Intra operative record and report it to Recovery. The patient care area should notify surgery regarding any isolation that may be in effect on a scheduled surgery patient. Surgery should notify the Recovery Room of patients requiring isolation. (See Surgery Isolation Policy.)

B. Outpatient Clinics/Centers

Outpatients known or suspected of having an illness that requires isolation shall be brought to an examination room as soon as possible and will follow department specific policies.

**CATEGORIES OF ISOLATION AND DISEASE PROCESSES**—Contact Infection Control if the disease of concern is not listed for specific isolation information. See Attachment A for donning and removal sequences for PPE. See Attachment B for Type and Duration of isolation for selected infections and conditions.
A. **Strict Isolation** is intended for those infectious agents which may be transmitted by the airborne and contact routes such as varicella (refer to Varicella Zoster MC 174). A negative pressure room is required. All persons are to enter and exit through anteroom.

1. **Required PPE**
   - Gowns are required for entering the room
   - Gloves are required for entering the room
   - Masks (isolation mask) are required for entering the room

*Family does not need to wear PPE’s*

B. **Contact Isolation** is intended to prevent transmission of infectious agents, including epidemiologically important microorganisms, which are spread by direct or indirect contact with the patient or the patient’s environment. A single patient room is preferred for patients who require Contact Isolation. When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate). In multi-patient rooms, greater than 3 feet spatial separation between beds is advised to reduce the opportunities for inadvertent sharing of items between the infected/colonized patient and other patients.

1. **Required PPE**
   - Gowns are required for entering the room.
   - Gloves are required for entering the room.
   - Masks are indicated for all persons entering the room or if within 3 feet of patient if there is a respiratory component to the infectious disease (i.e. RSV, Flu, Croup, MRSA in respiratory secretions. Refer to Attachment B.

* Family does not need to wear PPE’s while in room (refer VRE policy IN#43)

2. Cystic Fibrosis patients with multi-resistant Gram negative organisms will be placed in **Modified Contact Isolation**. The patient will wear a mask when out of his/her room. The patient will be instructed to wash hands before leaving room. Staff must wear gloves when providing patient care and pay strict attention to hand hygiene. Respiratory therapists are to wear gowns, masks, and gloves when providing cough producing procedures. CF patients are not to visit each other’s rooms. CF patients should not have close (less than 3-5 feet) contact with each other. Refer to Infection Control Practices for Patients with Cystic Fibrosis IN-12.

3. Isolation procedures for long term patients with MRSA and VRE will be followed. The Infection Control Staff and Hospital Epidemiologist will determine exceptions to this policy. If it is determined that the patient may leave their room, precautions must be maintained and instructions from the infection control staff obtained. In general:
   - Patients are to wash hands before leaving room and not touch any surfaces until outside.
   - Staff must escort the patient in the back elevator, which should have no other occupants.
   - Patients are not to wear PPE; staff are to contact Infection Control to determine which PPE’s will be worn by attending staff. This depends on which body sites are colonized and what activities attending staff will perform.
   - Staff are to perform hand hygiene upon return to patients room.
C. **Respiratory Isolation (Droplet)** is intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions. Because these pathogens do not remain infectious over long distances in a healthcare facility, special air handling and ventilation are not required to prevent droplet transmission. A single patient room is preferred for patients who require Respiratory Isolation. When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate). Spatial separation of greater than 3 feet and drawing the curtain between patient beds is especially important for patients in multi-bed rooms with infections transmitted by the droplet route.

1. **Required PPE**
   - Mask required for entering room or within 3 feet of patient depending on organism. Refer to Attachment B.

D. **Airborne Isolation** is indicated for patients infected with organisms spread through the airborne route via small droplet nuclei. These particles may remain suspended in the air for a prolonged period of time and may travel long distances. Preventing transmission requires special air handling and ventilation systems. Patients must be placed in a negative pressure room, refer TB Exposure Control Plan (MC#272) and Infection Control Guideline for Emerging Infections related to bioterrorism (IC 210) and Emergency Plan for Highly Communicable Respiratory Viruses (IC275).

1. **Required PPE**
   - N-95 mask which has been fit tested or PAPR is required for TB, SARS, and Avian Flu.
   - A procedure/regular isolation mask is indicated for entering room for measles (Rubeola).

E. **Drainage/Secretion Isolation** is indicated where the presence of excessive wound drainage, fecal incontinence, or other body secretions suggest an increased potential for extensive environmental contamination and risk of transmission. A single patient room is preferred. When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate). Healthcare personnel caring for patients should wear a gown and gloves for all interactions that may involve contact with the patient or potentially contaminated areas in the patient’s environment. Donning PPE upon room entry and discarding before exiting the patient room is done to contain pathogens, especially those that have been implicated in transmission through environmental contamination (e.g., *C. difficile*, *Rotavirus*, noroviruses and other intestinal tract pathogens).

1. **Required PPE**
   - Gloves if soiling likely
   - Gown if soiling likely
**Donning PPE**

**GOWN**
- Fully cover torso from neck to knees, arms to end of wrist, and wrap around the back
- Fasten in back at neck and waist

**MASK**
- Secure ties or elastic band at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin

**GOGGLES/FACE SHIELD**
- Put on face and adjust to fit

**GLOVES**
- Use non-sterile for isolation
- Select according to hand size
- Extend to cover wrist of isolation gown

**SAFE WORK PRACTICES**
- Keep hands away from face
- Work from clean to dirty
- Limit surfaces touched
- Change when torn or heavily contaminated
REMOVING PPE
Remove PPE at doorway before leaving patient room or in anteroom

GLOVES
- Outside of gloves are contaminated!
- Grasp outside of glove with opposite gloved hand; peel off
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist

GOGGLES/FACE SHIELD
- Outside of goggles or face shield are contaminated!
- To remove, handle by “clean” head band or ear pieces
- Place in designated receptacle for reprocessing or in waste container

GOWN
- Gown front and sleeves are contaminated!
- Unfasten neck, then waist ties
- Remove gown using a peeling motion; pull gown from each shoulder toward the same hand
- Gown will turn inside out
- Hold removed gown away from body, roll into a bundle and discard into waste or linen receptacle

MASK OR RESPIRATOR
- Front of mask/respirator is contaminated – DO NOT TOUCH!
- Grasp ONLY bottom then top ties/elastics and remove
- Discard in waste container

***HAND HYGIENE***
Perform hand hygiene immediately after removing all PPE!
<table>
<thead>
<tr>
<th>Infection/Condition</th>
<th>Type*</th>
<th>Precautions</th>
<th>Duration†</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abscess/Cellulitis/Osteomyelitis/Septic Arthritis</td>
<td>Contact</td>
<td>Duration of illness</td>
<td>Until proven not to be resistant organism</td>
<td></td>
</tr>
<tr>
<td>Adenovirus</td>
<td>Contact/Respiratory</td>
<td>Duration of illness</td>
<td>Mask upon room entry. Prolonged viral shedding</td>
<td></td>
</tr>
<tr>
<td>Bronchiolitis/unspecified respiratory virus</td>
<td>Contact/Respiratory</td>
<td>21 days</td>
<td>Mask within 3 feet of patient</td>
<td></td>
</tr>
<tr>
<td>Chicken Pox (Varicella)</td>
<td>Strict</td>
<td>Until lesions scabbed</td>
<td>Negative pressure room required, regular mask</td>
<td></td>
</tr>
<tr>
<td>Congenital Rubella</td>
<td>Contact</td>
<td>Until 1 year old</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conjunctivitis (viral)</td>
<td>Contact</td>
<td>Duration of illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croup</td>
<td>Contact/Respiratory</td>
<td>Duration of illness</td>
<td>Mask within 3 feet of patient</td>
<td></td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>Drainage/Secretion</td>
<td>Duration of illness</td>
<td>Isolation for diapered or incontinent patient</td>
<td></td>
</tr>
<tr>
<td>Gastroenteritis Rotavirus, C. difficile</td>
<td>Drainage/Secretion</td>
<td>Duration of illness</td>
<td>Isolation for all patients</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>Drainage/Secretion</td>
<td>Duration of illness</td>
<td>Isolation for all patients</td>
<td></td>
</tr>
<tr>
<td>Herpes Simplex</td>
<td>Contact</td>
<td>Until lesions dry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impetigo</td>
<td>Contact</td>
<td>24 hours of abx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza, Seasonal and H1N1</td>
<td>Contact/Respiratory</td>
<td>10 days</td>
<td>Mask upon room entry. Isolate for duration of illness in immunocompromised</td>
<td></td>
</tr>
<tr>
<td>Lice</td>
<td>Contact</td>
<td>Until treated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Isolation Precautions

**ATTACHMENT B**

**TYPE AND DURATION OF PRECAUTIONS RECOMMENDED FOR SELECTED INFECTIONS AND CONDITIONS**

<table>
<thead>
<tr>
<th>Infection/Condition</th>
<th>Precautions</th>
<th>Type*</th>
<th>Duration†</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles (rubeola)</td>
<td>Airborne</td>
<td>4 days after rash</td>
<td>Use regular mask, isolate for duration of illness in immunocompromised.</td>
<td></td>
</tr>
<tr>
<td>Meningitis</td>
<td>Drainage/Secretion</td>
<td>Duration of illness 24 hours abx</td>
<td>Isolate infants and young children See meningococcal disease below</td>
<td></td>
</tr>
<tr>
<td>Viral</td>
<td>Respiratory</td>
<td>Duration of illness 24 hours abx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacterial-Neisseria meningitidis, H-flu; Known or suspected</td>
<td>Respiratory</td>
<td>Duration of illness 24 hours abx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal diseases: sepsis, pneumonia</td>
<td>Respiratory</td>
<td>24 hours abx</td>
<td>Refer to Resistant organism policy IN 18</td>
<td></td>
</tr>
<tr>
<td>MRSA</td>
<td>Contact</td>
<td>Until cleared</td>
<td>Mask within 3 feet of patient</td>
<td></td>
</tr>
<tr>
<td>Mumps</td>
<td>Respiratory</td>
<td>9 days</td>
<td>Mask upon room entry</td>
<td></td>
</tr>
<tr>
<td>Parainfluenza</td>
<td>Contact/Respiratory</td>
<td>Duration of illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parvovirus B 19</td>
<td>Respiratory</td>
<td>Duration of illness</td>
<td>Isolation for immunosuppressed patients; for patients in red cell crisis, or transient aplastic crisis 7 day isolate</td>
<td></td>
</tr>
<tr>
<td>Pertussis</td>
<td>Respiratory</td>
<td>5 days abx</td>
<td>Parents to complete 5 days abx</td>
<td></td>
</tr>
<tr>
<td>Respiratory Syncytial Virus (RSV)</td>
<td>Contact/Respiratory</td>
<td>21 days</td>
<td>Mask within 3 feet of patient</td>
<td></td>
</tr>
<tr>
<td>Rhinovirus</td>
<td>Contact/Respiratory</td>
<td>Duration of illness</td>
<td>Mask upon room entry</td>
<td></td>
</tr>
<tr>
<td>Rubella (German measles)</td>
<td>Respiratory</td>
<td>7 days after rash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scabies</td>
<td>Contact</td>
<td>Until treated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scalded Skin Syndrome, staph</td>
<td>Contact</td>
<td>Duration of illness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streptococcus-Group A; pneumonia, sepsis, pharyngitis</td>
<td>Respiratory</td>
<td>24 hours abx</td>
<td>Negative pressure room, refer to Tuberculosis Exposure Control Plan-N-95 mask</td>
<td></td>
</tr>
<tr>
<td>Skin, wound, or burn</td>
<td>Contact</td>
<td>24 hours abx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulmonary Tuberculosis</td>
<td>Airborne</td>
<td>Until cleared by infection control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella Zoster</td>
<td>Strict</td>
<td>Until lesions scabbed</td>
<td>Refer to Varicella Zoster Infection Control Policy MC 174-negative pressure room</td>
<td></td>
</tr>
<tr>
<td>Viral hemorrhagic fever-Lassa, Ebola, Marburg, Crimean-Congo</td>
<td>Contact/Respiratory</td>
<td>Duration of illness</td>
<td>Enhance bloodborne pathogen safe work practices</td>
<td></td>
</tr>
<tr>
<td>Wound infections</td>
<td>Contact</td>
<td>Duration of illness</td>
<td>No dressing or dressing does not contain drainage</td>
<td></td>
</tr>
</tbody>
</table>

*Contact Infection Control at 682-885-4173 for isolation precautions for diseases not listed.