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II. Rationale

Persons receiving home health, home hospice, and inpatient hospice services are at risk of a health care-associated infection due to debilitating diseases or injuries. By following the practices described in this policy the risk of infection can be minimized.

III. Policy

A. Responsibilities

1. It is the responsibility of the Director of UNC Health Care Home Health, Home Hospice Services, Inpatient Hospice and Rex Health Care Home Health Services or his/her designee to implement and enforce this policy.

2. Nurses and other licensed professionals assume the responsibility for the Home Services Infection Prevention Program and Inpatient Hospice in consultation with the Infection Prevention departments from their respective facilities. Specialized infection prevention training is offered for UNC Health Care staff periodically. Contact UNCH Hospital Epidemiology at (984) 974-7500 for additional details regarding class dates. Additional training is at the discretion of Rex Health Care and UNC Infection Prevention.

B. Personnel Practices

1. Orientation

   a. Healthcare personnel assigned to work with Home Services and Inpatient Hospice are oriented to infection prevention during the hospital orientation provided to all new personnel. Additional yearly training is via Learning Made Simple (LMS).

C. Hand Hygiene

1. For full details regarding hand hygiene, please review the Infection Control Policy IC 0024: Hand Hygiene and Use of Antiseptics for Skin Preparation.

D. Occupational Health

1. Personnel should adhere to guidelines established by the Hospitals’ Occupational Health Service (OHS). Refer to the Infection Control Policy IC 0040: Infection Control and Screening Program: Occupational Health Service.

E. Bloodborne Pathogens and Tuberculosis


   a. Staff will follow the Exposure Control Plan of their home office facility (UNC or Rex). The UNC Health Care System Exposure Control Plan is located on the hospital intranet. A hard copy is available in the offices of UNC Home Health and Home Hospice Services. The Rex Health Care OSHA Exposure Control Plan can be found on the R drive of the Rex intranet and is available in hard copy from the Rex Infection Control Department.

   b. Barrier precautions/personal protective equipment (PPE) such as protective eyewear, mask, gloves, shoe covers, gown and CPR resuscitation masks must be used to prevent exposure to blood or other potentially infectious materials. For example, protective eyewear, mask, fluid resistant gown and gloves should be worn while performing wound irrigation.

      i. Home services personnel and volunteers must keep personal protective equipment within their vehicle at all times and carry the PPE into the patient’s residence upon visitation if the likelihood of use is anticipated. Carefully remove
after use and dispose of in the household trash. If heavily soiled, place the PPE in a plastic bag prior to placing in the trash.

ii. Home services personnel: Specimens should not be hand carried to the employee's vehicle. Place the primary specimen container in a plastic biohazard labeled bag. Seal the plastic bag and place in the rigid, leak-proof specimen transport container. This container should also display a biohazard symbol.

c. Contaminated personal clothing

i. Rex Health Care: Any Rex Home Service’s employee sustaining blood exposure to his/her clothing should bag the soiled clothing in a sealed red plastic bag labeled with his/her name and telephone number. The soiled clothing should be transported to Rex Hospital's Environmental Services Department for cleaning.

ii. UNC Health Care: Contaminated personal clothing must not be taken home for laundering. The same care shall be exercised in the handling of contaminated personal clothing as the PPE handling described above.

- During regular working hours (daytime), if personal clothing is contaminated, notify the manager of Linen Services (pager 123-9712) to obtain a set of scrubs. From 6:30pm – 3:00am, if personal clothing is contaminated, contact the Central Distribution (CD) Main - Supervisor at 984-974-4306 or Cell: 919-423-1579 to obtain a set of scrubs.

iii. Clean scrubs can be obtained through the methods outlined above and reimbursement offered for contaminated clothing may be discussed with the employee’s department.

d. All needlestick/sharp injuries, mucous membrane, and non-intact skin exposures must be immediately reported as outlined in the facility's plan. UNC Health Care employees should call the NEEDLESTICK HOTLINE AT (984) 974-4480, a 24 hours per day service. Rex Health Care employees should contact Employee Health Service at (919) 784-3159 for exposures occurring between 7:30 a.m. and 4:30 p.m. Monday - Friday. The Nursing Administrative Coordinator should be contacted for after-hours exposures including weekends and holidays by calling 784-3100 and asking for beeper 600.

F. Tuberculosis

1. Hospice and home care personnel must be trained to assess patients for signs and symptoms of tuberculosis and must be knowledgeable regarding management and prevention of transmission of TB. Personnel must follow the guidelines provided in their home facility's Tuberculosis Control Plan. For example, UNC Home care and Inpatient Hospice personnel must follow UNC Health Care’s Infection Control Policy IC 0060: TB Control Plan.

G. Vehicle Policy for Home Care Personnel

1. Home care personnel must use their personal vehicle for transportation of clean and contaminated patient care articles. Therefore it is prudent to employ basic infection control principles of separation and appropriate storage of clean and dirty items within the vehicle.

2. UNC Homecare Specialist delivery technicians should segregate clean and dirty items within the body of the van. Clean and dirty side should be clearly labeled and a visible indicator (red line) should be placed on the floor clearly separating the sides.

a. Delivery technicians maintain an infection control kit in each vehicle. Each kit contains face mask, gloves, gowns, eye protection, red bags, disinfecting solution, eye wash kit, and chemotherapy spill kit.
3. Patient care items and personal items belonging to the employee should be stored in separate areas of the vehicle.

4. All clean patient supplies including the nursing bag should be stored in an area of the vehicle that is clean and not likely to become wet or soiled. Supplies should not be placed on the floor of the vehicle.

5. Clean supplies not stored in the nursing bag should be kept in plastic bags or containers to prevent contamination.

6. Items considered contaminated (sharps containers, equipment needing cleaning prior to reuse) should be transported in a designated "dirty" area of the vehicle such as the trunk. These items should be stored and transported so that spilling or contamination of other items is avoided.

7. Any contamination of the vehicle with blood and or other body fluids should be removed with disposable towels and cleaned with an EPA registered disinfectant such as Super SaniCloths or Metriguard. Soiled towels should be placed in a plastic bag and disposed of in the household waste.

H. Reporting Communicable Disease

Note: Inpatient hospice must follow the Administrative Policy: Reporting of Communicable Disease.

1. In accordance with N.C. Public Health Law, the patient’s physician of record must report certain suspected or confirmed communicable diseases to the local health department. Reporting is accomplished by completing a Communicable Disease Report Forms (CD Report Forms may be obtained online from North Carolina Division of Public Health’s Epidemiology Section website) and mailing or faxing the completed form to the patient’s local health department within the required reporting period (24hrs or 7 days depending on disease). Although reporting communicable diseases is the physician responsibility, Home Health and Inpatient Hospice personnel should be aware of the reporting requirements to facilitate the process. Communicable Disease Report Forms should be kept in the Home Health office to provide to the physicians as needed. At UNC Health Care System, completed forms should be sent immediately to Hospital Epidemiology who will forward them to the health department. For any questions or problems related to communicable disease reporting, call Hospital Epidemiology at (984) 974-7500 and ask for the Public Health Epidemiologist. For Rex Health Care, notify Infection Prevention at (919) 784-3219.

I. Patient Care Practices

1. Sterile/Clean Supplies

   a. Sterile and clean supplies must be stored in a designated clean utility area of the Home Health, Home Hospice office and Inpatient Hospice. Sterile patient care items should be stored at least 8 inches from the floor and at least 5 inches from the ceiling on a wall mounted shelving unit. (18 inches below sprinkler head). No patient care supplies should be stored on the floor, on a shelf or in a cabinet underneath the utility room sink. Supplies with an expiration date must have the date routinely checked (e.g., monthly) and the supply discarded if expired.

   b. Sterile/Clean patient supplies and equipment must be stored in a clean container. Perform hand hygiene before handling any patient care supplies or equipment. Remove only those articles that are needed.

   c. Home services personnel only: A box of gloves may be carried in the clean section of the supply bag/fanny pack and hand hygiene must be performed before entering the bag/pack and removing the gloves to be worn during that visit. A plastic bag containing
several pairs of gloves may be taken into the home and left for future use when appropriate.

d. Home services personnel only: The nursing clinical bag is issued by the home office and used for transport of medical supplies. The following guidelines must be used for managing the bag and supplies:

   i. The bag should be placed on a visibly clean, dry surface away from small children and pets.
   
   ii. If the home environment is heavily infested with insects or rodents, the bag should be left in the car or hung on a doorknob.
   
   iii. The clinician must take only the equipment he or she will need for that visit and also his/her PPE and alcohol-based hand rub or liquid soap and paper towels.
   
   iv. Only supplies necessary to provide care for each patient are removed.
   
   v. The bag may be replaced as needed. If contaminated with blood/body fluids, it must be decontaminated using an EPA-registered disinfectant-detergent or discarded.

   e. Home services personnel only: Any supply that is left in the patient’s home must remain with that patient and cannot be removed for use for another patient. In addition, unused patient supplies should be discarded when:

      i. The item is visibly soiled.
      
      ii. The item was opened or the integrity of the package has been compromised.
      
      iii. The manufacturer’s expiration date has been reached.
      
      iv. The item is removed from the nursing or supply bag and the patient is being cared for under Isolation Precautions.

   f. Home services personnel only; UNC Health Care Home Hospice Service may provide a small amount of linen for certain patients. The linen will become the property of the patient and will not be returned to Home Hospice.

J. Wound Care

   1. Aseptic technique is used for wound care. Clean exam gloves are used to remove old dressings. Hands are then washed and new clean exam gloves are donned for the application of the new dressing.

   2. Only sterile solutions (e.g., normal saline or sterile water) should be used for wound care. Any unused portion should be discarded immediately after use. If using aerosol solutions, discard per expiration date on container unless the manufacturer’s instructions indicate otherwise.

   3. Soiled dressings should be contained within a closed plastic bag and disposed of in the patient’s trash if in the home. Soiled dressings should not be transported to the home office.

   4. Wound-VACs: Follow the manufacturer’s guidelines for changing the wound-VAC. To dispose of the dressing and canister, carefully place the items in a plastic bag and seal. Deposit in a waste can in the patient’s home if in the home. Inpatient management of Wound Vacs should follow UNC policy.
K. Infusion Therapy

1. The use and maintenance of IV catheters will follow the guidelines of the Hospital Infusion Policy of Rex and/or UNC. UNC Health Care’s Infection Control Policy IC 0032: The Prevention of Intravascular Catheter-Related Infections.

L. Phlebotomy

1. All venous access will be done using a safety-engineered device and the sharp disposed of at the point of use.

2. Aseptic technique must be followed for any blood drawing procedure.

3. A new tourniquet should be used for each phlebotomy event. Tourniquets should not be reused from patient to patient.

4. When accessing implanted catheters or central lines for obtaining blood specimens, carefully follow the guidelines provided in the Infection Control Policy IC 0032: The Prevention of Intravascular Catheter-Related Infections.

5. Inpatient hospice should follow inpatient routines for specimens. Home services’ specimens should be placed in a plastic zip lock lab specimen bag bearing a Biohazard label and carefully closed. Take care not to contaminate the outside of the specimen tube or the specimen bags. The specimens are then placed in the provided rigid container for transportation. This container should display a biohazard label.

M. Urinary Catheterization

1. Placement of a urinary catheter requires a physician order. Guidelines for catheterization are provided in the home care policies and procedures manuals, the inpatient UNC Nursing Policy NURS: 0143 - Urinary Drainage Devices policy, and the Infection Control Policy IC: 0030 – Guidelines for Adult and Pediatric Inpatient Care. Please follow the appropriate policy for the patient’s care setting

2. Specifics for the Home Services care setting:
   a. A closed drainage system should be maintained for indwelling bladder and suprapubic catheters. If the catheter and drainage tube must be disconnected for irrigation or for placement of a leg bag the following must be done.
   b. Prior to disconnecting the catheter drainage tube, the connection site should be thoroughly cleaned using an alcohol iodophor solution. Disconnection should be performed so that contamination of the catheter and tubing is avoided.
   c. Preferably a new drainage tube and bag should be used when reconnecting but if not possible, the tip of the drainage tube should be covered with sterile gauze secured with a rubber band.
   d. The ends of the catheter and drainage tube should be cleaned with alcohol iodophor solution prior to reconnection.
   e. Bladder irrigations are performed only upon physician order. For patients who undergo continuous or frequent irrigation, a 3-way catheter should be used.
   f. Catheters are changed monthly and PRN with physician’s order. If there is incomplete drainage or interrupted flow the catheter may need to be changed.
   g. Specimens must be taken from the port not from the drainage bag. Thoroughly cleanse the port with alcohol for 15 seconds and allow it to dry before accessing.
h. The drainage bag should remain below the level of the bladder. The drainage tube should be secured to the patient's thigh and should be positioned to allow continuous downward drainage.

i. Collection containers used to empty drainage bags are single patient use. They are rinsed after each emptying and discarded when the catheter is discontinued.

j. Leg bags:
   i. Leg bags are applied for use when the patient is ambulatory.
   ii. The patient or caregiver should be taught to empty the bag at frequent intervals.
   iii. After use, the bag should be rinsed and hung to dry.

N. Respiratory Care for Home Care Services and Home Care Specialists

Note: Inpatient care setting must follow the Respiratory Care Department Infection Control Policy.

1. Home Care Services and Home Care Specialist specifics:
   a. Respiratory therapy equipment such as oxygen equipment is the responsibility of UNC Homecare Specialist. The patient and family members are instructed by the appropriate staff regarding safe and appropriate use.
   b. It is the responsibility of any outside contracting company that delivers respiratory therapy equipment to maintain the equipment and provide patient education.
   c. Humidifiers and nebulizers should be refilled using sterile water or commercially prepared distilled water. Tap water should not be used. The container used to refill the humidifier or nebulizer should be labeled with date and time the container was opened and stored in a clean area of the patient’s home. Discard any unused water after 24 hours.
   d. Humidifier reservoirs should be cleaned weekly with warm soapy water and rinsed with tap water prior to refilling.
   e. Nebulizers should be cleaned daily with warm, soapy water and rinsed with tap water.
   f. CPAP/BiPAP machines should be maintained per UNC Homecare Specialist recommendations:
   g. CPAP/BiPAP mask should be cleaned daily with warm, soapy water and rinsed using tap water.
   h. CPAP/BiPAP tubing should be cleaned once per week with warm, soapy water and rinsed using tap water.
   i. Oxygen concentrator filters should be maintained in a clean manner and the filters should be washed weekly with warm, soapy water, rinsed and air dried.
   j. Suctioning:
      i. Clean technique is used for oral or tracheal suctioning unless sterile suctioning is ordered.
      ii. Suction catheters are disposed of after each use.
      iii. The Yankauer suction device is flushed with water and vinegar after each use.
      iv. Suction canisters and the collection tubing are used for one patient only and discarded when necessary.
v. Suction canisters should be emptied, rinsed and cleaned with warm, soapy water daily. After cleaning, 50-100ml of water should be added to the canister to prevent any secretions from sticking to the plastic.

vi. The suction tubing should be rinsed with tap water and vinegar after each use. Disinfect once per week by rinsing the tubing with a 1:10 bleach solution provided by the patient/caregiver. Bleach solutions expire in 30 days.

k. Tracheostomy tubes should be cleaned as per manufacturer’s directions. The following guidelines are safe for most tracheostomy tubes.

i. Clean tracheostomy tubes, including inner cannulas, with 25% hydrogen peroxide solution (3 parts sterile water to 1 part 3% hydrogen peroxide). The hydrogen peroxide solution should be prepared just before using and any unused solution discarded.

ii. Rinse thoroughly with sterile water after cleaning.

iii. Do not clean inner cannulas with bleach or any bleach-containing solution.

O. Medications

1. Medication management in the inpatient hospice setting will follow all UNC medication management policies.

2. Home Care Services and Home Care Specialists
   a. Medications prepared by UNC Homecare Specialist pharmacy should be consistent with UNC Pharmacy policies and USP 797 recommendations to the fullest extent possible.
   b. Medications should be stored as directed by the manufacturer.
   c. Medications are ordered by the patient’s physician and dispensed by a pharmacy.
   d. Single dose medication vials are intended for one time use only and will be discarded immediately after use.
   e. Thoroughly cleanse the top of any medication vial with alcohol before entry.
   f. When a multi-dose vial is opened, the expiration date (28 days after first use) should be written on the vial (unless manufacturer’s expiration date is earlier). The vial should be discarded at the expiration date.

P. Irrigation Solutions and Equipment

1. Sterile solutions used for irrigation are single-dose and any unused solution is discarded immediately after use.

2. Irrigation equipment is single patient use and discarded when no longer needed.

3. The patient’s physician must order any solution used to irrigate a body cavity.

Q. Enteral Feeds

1. The inpatient hospice setting must follow all UNC inpatient policies regarding enteral feedings.

2. Home Care Services and Home Care Specialists
   a. Aseptic technique must be used while pouring formula into bag. Bags must be labeled with date and time.
   b. Once prepared, formula may keep for 24 hours.
   c. The entire administration system must be discarded every 24 hours.
d. Closed system tube feeding formula bags may hang for up to 48 hours.

R. Animals in the Home

Note: Inpatient hospice must follow the Admin policy 0190: Service Animals

1. Animals should be removed from the room in which the visit occurs if a dressing change or other procedure requiring aseptic technique is planned.
2. Patients should be instructed not to allow animals to touch open wounds.
3. Staff should report to OHS any scratches or bites they receive from animals in the home.

S. Blood and Body Fluid Spills

Note: Inpatient hospice must follow the Exposure Control Plan for Bloodborne Pathogens.

Spills of Blood and Body fluids in Home Care Services and Home Care Specialists settings:
1. Always wear appropriate personal protective equipment when cleaning up spills of blood and body fluids.
2. If broken glass is involved, it must be removed using a mechanical device (e.g., forceps or brush and pan) and placed in a rigid container (e.g., sharps container, coffee can, or aluminum can).
3. Spills of blood and body fluids must be cleaned up immediately using the provided body fluid spill kit. Carefully follow the instructions provided in the kit. A 1:10 bleach solution may be used to decontaminate the spill area (bleach solution is provided by the family/caregiver) or agency approved disinfectant-detergent. Bleach solutions expire 30 days after mixing.
4. If the spill occurs on upholstered furniture or carpet, use dry paper towels to absorb as much of the spill as possible, then wash the area thoroughly with soap and water or use an appropriate cleaner for upholstery or carpet if available in the residence.
5. Patient owned bed linen contaminated with blood or body fluids should be washed in hot soap and water in the patient’s home.

T. Equipment

Note: Inpatient hospice must follow the Cleaning, Disinfection and Sterilization of Patient Care Items policy.

Equipment cleaning/care for Home Care Services and Home Care Specialists settings:
1. Telemonitoring equipment (Telestation, BP monitor, BP cuff, pulse oximetry unit, scales, and accessory equipment) should be bagged when removing from patient’s home and sent to UNC Homecare Specialist for terminal cleaning and disinfection in accordance with the Equipment, Cleaning, and Testing Procedure (Appendix 3). Clean equipment should be stored in a manner that will prevent recontamination.
2. Home Medical Equipment leased by UNC Homecare Specialist (Hospital Beds/Frames, Wheelchairs, infusion pumps/poles, CPMs) should be cleaned with an EPA-registered disinfectant consistent with Appendix 3.
3. Reusable items (i.e., blood pressure cuffs, pulse oximeters, stethoscopes, flashlights) will be cleaned with an EPA-registered disinfectant (i.e., Sani Cloths) - after use on each patient, and when visibly soiled. Bandage scissors will be cleaned before and after use with an EPA-registered disinfectant. If the item becomes heavily soiled with dirt or blood and body fluids, wash with soap and water followed by an EPA-registered disinfectant. For patients with
known or suspected *C. difficile* or norovirus infection, clean reusable equipment using a bleach wipe or 1:10 bleach solution.

4. Medical devices that are labeled by the manufacturer, as single-use may not be reused. Refer to the Infection Control Policy IC0058 “Reuse of Single Use Devices” for additional information.

5. Scales are transported in the “dirty” section (e.g., trunk) of the vehicle. Prior to use, the scales must be cleaned using an agency-approved disinfectant.

6. All agency approved cleaning agents will be reviewed and approved by UNC Hospital Epidemiology Department or Rex Health Care Infection Prevention Program.

**U. Medical Waste Disposal**

1. Home care settings: Solid waste, including wound dressings, empty blood transfusion bags, IV bags and tubing sets shall be disposed of within the patient’s home. Wound dressings should first be placed in a closed plastic bag prior to placing in the trash.

2. Home care settings: Regulated medical waste – except sharps disposal boxes which are addressed below -- should be disposed of in the home trash and not transported back to the home office. Refer to the Infection Control Policy IC 0054 “Guidelines for Disposal of Regulated Medical Waste” for additional information.

3. The inpatient hospice setting shall follow the Infection Control policy IC0054 "Guidelines for disposal of Regulated Medical Waste."

4. Sharps Disposal
   a. Sharps should be disposed of at the point of use by placing in a rigid, puncture-proof container. Sharps include such devices as needles, syringes with needles attached, blood collection devices, and other sharp edged items such as razors, glass vials and glass capillary tubes.
   b. Home care settings: The sharps container must be of a design or stored in the vehicle in such a manner that it cannot tip over and the contents spill. The sharps container should be transported in the “dirty” compartment (i.e., trunk) of the vehicle.
   c. Home care settings: When the sharps container is three quarters filled, close securely and discard as directed by the home facility's medical waste disposal policy.
   d. Home care settings: Patients should be instructed on the proper disposal of sharps used by themselves or other personal care givers. Sharps can be placed in a heavy-gauge plastic or metal container that can be sealed (e.g., laundry detergent bottle, bleach bottle, coffee can). When the container is full, it should be sealed and disposed of in the household waste.

**V. Transmission-Based Isolation Precautions for Home Care Settings**

<table>
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<th>Note:</th>
<th>Inpatient Hospice must follow the Infection Control Policy IC0031- Isolation Precautions.</th>
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1. Transmission Based Isolation Precautions are designed to interrupt transmission of highly transmissible or epidemiologically important pathogens for which additional precautions beyond Universal/Standard Precautions are needed. The terminology and categories of precautions differ but most importantly, the principles are the same. The following guidelines are provided to assist the home care provider when working with a patient who may require special precautions in addition to universal/standard precautions. Consultation with an Infection Preventionist is recommended for any questions or problems with the application of transmission based isolation precautions in the home setting.
2. Airborne Infection Isolation will be followed for all patients with a known or suspected airborne disease such as tuberculosis or chickenpox. All visiting personnel (and volunteers when applicable) must have a medical evaluation and be fit-tested and trained for NIOSH approved respirators prior to assignment to such patients. Respirators will be worn when in the home of an infectious tuberculosis patient. The respirator should be donned prior to entering the home and not removed until outside the home. All UNC Health Care personnel are immune to chickenpox (varicella) if all employment vaccines/immunity criteria are met and thus are not required to wear a respirator in the presence of chickenpox or shingles. Non-immune personnel (i.e. some volunteers) should wear a respirator if the patient has chickenpox or shingles.

3. Droplet Precautions are designed to reduce transmission involving contact of the conjunctiva or mucous membranes of the nose or mouth with large droplets generated by the patient during coughing, sneezing, talking, or during the performance of invasive procedures. Examples of diseases requiring Droplet Precautions include pertussis and influenza. An isolation or surgical mask is worn when caring for the patient. The mask should be donned when entering the room of the patient and removed when exiting the room.

4. Contact Precautions are followed as closely as possible in the home setting. They are used to prevent the transmission of epidemiologically significant organisms such as antibiotic resistant bacteria (e.g., MRSA, VRE, CRE) and certain enteric pathogens (e.g., C. difficile, norovirus). Gloves and a gown must be worn for all contact with the patient and the patient’s environment. Change gloves while providing care to prevent cross contamination of body sites and to reduce the spread of organisms in the home environment. Hand hygiene must be performed immediately after glove removal (soap and water only for C. difficile and norovirus). When leaving the home, care should be taken not to contact potentially contaminated surfaces.

   a. Leave the nursing bag in the car and take only those supplies that will be needed for the patient into the home. Supplies should be carried into the home in a clean plastic bag and the bag disposed of after use in the patient’s trash.

   b. Any reusable equipment such as blood pressure cuffs, stethoscopes, and sharps containers should be thoroughly cleaned with an EPA-registered disinfectant detergent (i.e., Metriguard, Sani Cloths) after use and before returning to the nursing bag or vehicle. Equipment used for patients with C. difficile and norovirus should be cleaned with a bleach wipe or 1:10 bleach solution. Leave equipment in the home for subsequent use when possible.

   c. Special handling of wound dressings and linen is not indicated.

5. The immunocompromised patient requires special Protective Precautions. Strict hand hygiene prior to care is always indicated. Personnel/volunteers should not visit if ill or incubating a potentially communicable infection such as an upper respiratory infection. Consultation with the patient’s physician may be needed to determine if any additional precautions should be taken.

IV. References

Association for Practitioners in Infection Control and Epidemiology, Inc. (APIC) and Missouri Alliance Home Care (MAHC). *Home Care Handbook of Infection Control*. Chinnes L, Dillon A, Fauerbach L eds. 2002.


V. Reviewed/Approved by

Hospital Infection Control Committee

VI. Original Policy Date and Revision

Appendix 1: Criteria for Home Health, Home Hospice and Inpatient Hospice Care
Associated Infection

The evaluation of a suspected infection should include consideration of whether the symptoms are new or acutely worse from the established baselines. Non-infectious causes also must be considered. The definition of infection includes more than a single sign or symptom. Physician diagnosis should be accompanied by compatible signs and symptoms of infection in most cases. Laboratory reports (microbiology and serology findings) alone are not used to define infection, but may be used adjunctively as supportive evidence to confirm infection.

The idea of using a designated temperature for fever is controversial, especially as many elderly persons have minimal or no temperature increase and not all agencies perform routine temperature checks on every patient in the absence of direct indications. However, for surveillance purposes, fever needs to be specified. Therefore, fever is present when the patient's temperature is 2.4 F degrees greater than the baseline temperature. This is important to note since normal temperature in the elderly is usually lower than 98.6 F. An elderly patient can be running a fever at 99.0. (Resident Assessment Instrument/RAI)

Defining infection in a patient receiving home health and/or home hospice care depends upon a new sign(s) or symptom(s) identified by a clinician or other healthcare personnel. Supportive evidence from laboratory or other diagnostic testing can be used to confirm support criteria for a possible HAI.

The following definitions by anatomical site are provided as criteria to identify home and home hospice HAIs in those patient populations and are fundamental to establishing a surveillance program. Surveillance programs are geared toward prevention of these adverse outcomes in the patient population.

Symptomatic urinary tract infections (SUTI) can occur without prior instrumentation (e.g., intermittent catheterization), but this is rare.

Catheter-Associated Urinary Tract Infections (CA-UTI)

Catheter-associated urinary tract infections are associated with instrumentation of the patient's urinary tract prior to onset. To associate these infections with an indwelling urinary catheter requires presence of an indwelling urinary catheter at the time of or within 7 days before the onset of the symptomatic UTI.

Symptomatic catheter-associated urinary tract infections must meet one of the following criteria:

1. Two of the following four signs or symptoms:
   a. Fever OR chills with no other external urinary source noted
   b. Flank pain OR suprapubic pain OR tenderness OR frequency OR urgency
   c. Worsening of mental OR functional status
   d. Changes in urine character (e.g., new bloody urine, foul odor, increased sediment) AND urinalysis or culture is not done
2. **One** of the following two signs or symptoms:
   a. Fever OR chills
   b. Flank pain OR suprapubic pain OR tenderness AND both bacteriuria (determined by a positive urine culture for a potential pathogen or a positive nitrite assay by dipstick) and pyuria (determined by 10 or more wbc/hpf on urinalysis or positive leukocyte esterase assay by dipstick).

**NOTE:** Asymptomatic urinary tract infections are not included in these definitions.

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**Catheter-Associated Bloodstream Infections (CA-BSI)**

For a BSI to be considered catheter-associated the patient must have a central catheter in place and **one** of the following three criteria must be met:

1. Patient has a recognized pathogen cultured from one or more blood cultures AND organism cultured from blood is not related to an infection at another site.
2. Patient has at least **one** of the following three signs or symptoms:
   a. Fever
   b. Chills
   c. Hypotension
   **AND** signs and symptoms and positive laboratory results are not related to an infection at another site
   **AND** common skin contaminant (e.g., diphtheroids, *Bacillus* spp., *Propionibacterium* spp., coagulase-negative staphylococci, or micrococi) cultured from two or more blood cultures drawn on separate occasions
3. Patient aged <1 year has at least **one** of the following four signs or symptoms:
   a. Fever
   b. Hypothermia
   c. Apnea
   d. Bradycardia
   **AND** signs and symptoms and positive laboratory results are not related to an infection at another site
   **AND** common skin contaminant (e.g., diphtheroids, *Bacillus* spp., *Propionibacterium* spp., coagulase-negative staphylococci, or micrococi) cultured from two or more blood cultures drawn on separate occasions

**NOTE:** When an organism that is isolated from a blood culture is compatible with a related infection at another site, the bloodstream infection is classified as a secondary bloodstream infection.

**NOTE:** Infections related to intravascular access devices are classified as primary, even if localized signs of infection are present at the access site.
**Surgical Site Infections (SSI)** Post-operative wound infections (e.g., potential surgical site infections) are reported as soon as they are discovered to the Infection Prevention Department at Rex or UNC Hospitals. The Infection Prevention departments will investigate and notify outside hospital systems as needed.

SSI definitions are included in the surveillance program for the home health and home hospice care agency to assist in identifying the SSI before reporting their findings to the Infection Prevention department at UNC or Rex. It is not necessary that all these criteria be met for reporting to the Infection Prevention department.

**A surgical site infection (SSI) is defined as:**

1. Infection occurs no more than 90 days after the operative procedure **AND**
2. **Two** of the following seven signs or symptoms:
   a. Purulent drainage from the incision OR drain
   b. Pain or tenderness
   c. Localized swelling
   d. Redness
   e. Heat
   f. Spontaneous dehiscence of the incision
   g. Fever

**NOTE:** Surgical site infections should be considered healthcare associated infections and reported to the Infection Prevention department to investigate further and report to the facility where the surgery was performed.
Appendix 2: Home Health and Home Hospice, and Inpatient Hospice Care Infection Report Form

Client Name: ____________________________ Agency: ____________________________
Agent Name: ____________________________ Hospital MR# ____________________________

Complete the section that applies to the type of suspected infection

Catheter-Associated Urinary Tract Infection (CA-UTI)

Requires one of the following, presence of an indwelling urinary catheter:

☐ at the time of onset of the symptomatic UTI.
☐ within 7 days before the onset of the symptomatic UTI.

-AND-

Requires one of the following two criteria:

1. ☐ Two of the following four signs or symptoms:
   ☐ Fever OR chills with no other external urinary source noted
   ☐ Flank pain OR suprapubic pain OR tenderness OR frequency OR urgency
   ☐ Worsening of mental OR functional status
   ☐ Changes in urine character (e.g., new bloody urine, foul odor, increased sediment) AND urinalysis or culture is not done

2. ☐ One of the following two signs or symptoms:
   ☐ Fever OR chills
   ☐ Flank pain OR suprapubic pain OR tenderness AND both bacteriuria (determined by a positive urine culture for a potential pathogen or a positive nitrite assay by dipstick) and pyuria (determined by 10 or more wbc/hpf on urinalysis or positive leukocyte esterase assay by dipstick).

Please fax completed Infection Report to UNC Hospital Epidemiology, 984-974-7719 and Rex Infection Control at 919-784-3451.
Home Health, Home Hospice, and Inpatient Hospice Care Infection Report Form

Client Name: __________________________ Agency: ___________________________
Agent Name: _________________________ Hospital MR#_________________

Complete the section that applies to the type of suspected infection

Catheter-Associated Bloodstream Infections (CA-BSI)

Requires:
- central catheter in place

AND,

Requires one of the following three criteria:
1. □ Patient has a recognized pathogen cultured from one or more blood cultures -AND-
   □ Organism cultured from blood is not related to an infection at another site.
2. □ Patient has at least one of the following three signs or symptoms:
   - Fever
   - Chills
   - Hypotension
   -AND-
   □ Signs and symptoms and positive laboratory results are not related to an infection at another site
   -AND-
   □ Common skin contaminant (e.g., diphtheroids, Bacillus spp., Propionibacterium spp., coagulase-negative staphylococci, or micrococci) cultured from two or more blood cultures drawn on separate occasions
3. □ Patient aged <1 year has at least one of the following four signs or symptoms:
   - Fever
   - Hypothermia
   - Apnea
   - Bradycardia
   -AND-
   □ Signs and symptoms and positive laboratory results are not related to an infection at another site
   -AND-
   □ Common skin contaminant (e.g., diphtheroids, Bacillus spp., Propionibacterium spp., coagulase-negative staphylococci, or micrococci) cultured from two or more blood cultures drawn on separate occasions

Please fax completed Infection Report to UNC Hospital Epidemiology at 984-974-7719 and/or Rex Infection Control at 919-784-3451.

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<tr>
<th>Subject: Equipment, Cleaning and Testing</th>
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<td>Reviewed: 5/2002, 10/16</td>
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**Purpose**

To ensure that all equipment sent to patients is clean performs safely, accurately and reliably.

**Policy**

1. Equipment will be cleaned and inspected after each patient use and according to manufacturer’s recommendations.
2. Equipment is sent out to the manufacturer or a biomedical services company for annual maintenance as appropriate.

**Procedure**

1. All equipment will be cleaned, inspected and tested when returned from patient use.
2. Cleaning will be done according to manufacturer’s recommendations which may include the following procedures:
   a) Disposable gloves will be worn by any person handling and/or cleaning a device to prevent the contamination of self with potential pathogens (universal precautions).
   b) Devices will be cleaned with a mild soap solution or other suitable cleaner, as per manufacturers’ recommendations. Housing, power cords and other functional parts should be cleaned.
   c) After cleaning, the device should be disinfected using isopropyl alcohol or other EPA-registered disinfectant, and then allowed to dry.
   d) After cleaning, the equipment should be inspected and tested using established checklists for each device in accordance with manufacturer’s recommendations. Checks will vary with the type of equipment and may include at least:
      i) Visual inspection of housing, signs of damage, misuse, infestation, bent or frayed cords and plugs as well as any exposed operational part.
      ii) Mechanical operation of keypads, battery doors, switches, displays, levers, etc.
      iii) Functional operation of alarms (occlusion, air, etc.), indicators, locks, etc.
iv) If a device contains a rechargeable battery, check to see if it will operate utilizing the battery. Keep plugged in patient ready area to maintain charge.

v) Volume testing on infusion pumps and enteral pumps measures the accuracy of the volume delivered within a specific time frame.

- For large volume pumps set the pump to deliver a specific amount of fluid over a specific time. Set a timer. Document the amount that was delivered on the inspection sheet.
- For small volume pumps (syringe devices, cassette devices) fill a syringe/cassette with a specific amount. Connect it to an appropriate set. Set a timer. Document the amount that was delivered over a specified time on the inspection sheet. If the amount is not correct, repeat the volume test. After 2 failures, the device should be sent to the manufacturer for servicing.

vi) Performance testing on all respiratory equipment will be done in accordance with manufacturer’s recommendations. All respiratory equipment must meet manufacturer’s guidelines or must be replaced with properly functioning equipment.

3. Any device not meeting the requirements during routine inspection should be returned to the manufacturer or authorized company to be repaired or replaced.

4. If a piece of equipment goes unused for one year, it should be rechecked and documented before distributing to a patient.