

CONNECTICUT VALLEY HOSPITAL INFECTION CONTROL MANUAL

Section IV: Infection Control in Support Services
Chapter IV.F: Physical Therapy
Title:
Effective Date: 9/11/1997
Revision Date: 6/5/2003
Review Date: 7/19/2001; 6/19/2003; 9/16/2004; 9/15/2005; 10/19/2006

PURPOSE

Prevent the transmission of infection among patients, personnel and visitors.

POLICY

The Physical Therapy Service follows guidelines for infection control management of treatment areas and equipment.

STANDARD PRECAUTIONS AND GENERAL PRACTICES

1. Standard Precautions

Standard precautions are to be used at all times. Whenever contact with blood or body fluids is anticipated, the use of disposable gloves, gowns, and masks (Personal Protective Equipment) must be used as appropriate to the situation.

- a. Hands should be washed immediately if there is contact with blood or body fluids.
- b. Waste contaminated with blood or body fluids should be placed in red infectious waste receptacles for disposal. Laundry should be placed in disposable green plastic bags.
- c. Blood and body fluid spills should be cleaned promptly and disinfected with a solution of bleach/water 1:10 dilution. Special kits for large blood spills are available in the cabinet in the whirlpool room. Replacements are available from Central Medical Supply.
- d. The service participates in the hospital monitoring program for employee compliance with Standard Precautions.
- e. Refrigerator temperatures are monitored and logged daily. Paraffin wax and hydrocollator machine temperatures are monitored and logged weekly.

2. General Practices – Physical Therapy Employee Guidelines

- a. Hand Hygiene – Staff must perform proper hand hygiene when:
 - Coming on duty
 - Hands are contaminated with blood or body fluids
 - Before and after personal use of the restrooms
 - After blowing or wiping of the nose or coughing or sneezing
 - Before and after any patient contact
 - Before entry and upon leaving an isolation area
 - After handling equipment
 - After removing gloves and when going off duty
 - After usage of chemicals.

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Handwashing facilities and hand sanitizer dispensers are located in close proximity of all treatment areas. Follow hand hygiene technique as described in Infection Control Manual – Section II.A.

- b. Personal Protective Equipment (e.g., masks, gloves and gowns) is available throughout the Physical Therapy Department (hallways, whirlpool area, and gym) for staff to provide protection from exposure to blood and body fluids.
 - 1) Non-sterile disposable gloves are available in all treatment locations. Staff must use disposable gloves before contact with patient blood and body fluids. This includes contact with patients who have oral motor dysfunction. Gloves must be changed and hands washed, before contact with another patient or piece of therapy equipment.
 - 2) Disposable gowns are available additionally in all treatment areas. These should be utilized to protect street clothing from blood and body fluids. Gowns should be used during dressing changes if contact with blood and body fluids is anticipated.
 - 3) Face Shields are available in the hydrotherapy area and should be used whenever a splash is anticipated.
- c. Employee Health
All personnel in the Physical Therapy Service must have a physical examination prior to employment. Studies performed include QuantiFERON-TB ELISA blood test and lab work. Treatment staff must be free of open skin lesions and other infections. It is the responsibility of the employee to seek medical attention for illness. Employees who feel ill are instructed to report their illnesses and will then be cleared for work or dismissed on sick leave through appropriate medical and administrative channels.

3. Guidelines for Visitors

Visitors are permitted access to the Physical Therapy Area under the guidelines of the hospital visitor's policy. At the discretion of the treating physical therapist, visitors are permitted to enter the treatment area, but should stay within the patient's treatment cubicle. If Personal Protective Equipment is required, visitors should be supplied with the necessary protective gear. Persons with known infections or communicable diseases will not be allowed to visit in the Physical Therapy area.

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4. Laundry and Storage Practices

- a. The Physical Therapy Service obtains needed linens and stores them in a closet with a door. Soiled laundry is stored in a separate location and collected weekly. All laundry is considered contaminated and placed in a disposable green plastic bag. Refer to [Infection Control Manual – Practices for Handling of Linen and Laundry \(Section IV.K\).](#)
- b. Treatment tables should be covered with a clean sheet and pillowcase prior to the start of the treatment session.
- c. Patients receiving hydrocollator pack or cold pack treatments should not have direct skin contact with either the pack or the protective cover. Toweling should be used as an insulating layer and to protect the cover from contamination.

5. Disposal of Trash

Trash disposal cans are located in all treatment areas and are emptied on a regular basis by the housekeepers. If more frequent collection is indicated, housekeeping should be notified.

6. Disposal of Infectious Waste

Patient dressings and other disposable contaminated materials should be placed into a red infectious waste receptacle. Housekeeping will be called to remove red infectious waste bags when half filled. As with all contaminated materials, staff should utilize protective barrier measures and handle materials with care to avoid contact.

7. Chemical Agents and Use Guidelines

The Infection Control Committee provides for the review and approval of chemical agents in use. All chemical agents and sharp objects are in locked areas. In the Physical Therapy Service, a number of chemical agents are utilized for providing patient treatment and for the cleaning of treatment areas and equipment. Staff should read the labels of the chemical agents and familiarize themselves with the Material Safety Data Sheets available on each of the chemicals to be aware of protective precautions/actions warranted with their use.

Material Safety Data Sheets are kept with the telephone operator for 24-hour access.

LISTING OF TREATMENT AGENTS:

- a. [Chlorazine](#) – Chlorine based whirlpool additive T-Chloramine. Dosage 20 grams per 30 gallons (two teaspoons). Slow release stabilized chlorine used for wound treatment and pre and post tank disinfecting.

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Procedure:

- 1) Fill the tank.
- 2) Add appropriate amount of Chlorazine.
- 3) Turn turbine on for 3 minutes to disinfect turbine and tank.
- 4) Treat patient – 20 minutes or as prescribed.
- 5) Remove patient and leave turbine on for an additional 3 minutes for post-treatment turbine disinfecting.
- 6) Drain tank. Wipe with hard surface disinfectant.
- 7) Rinse tank.
- 8) Wipe dry.

CAUTION: Extremely fine powder. Add to whirlpool at water level with turbine off. Avoid drafts or airflow that would allow chemical to become airborne. Use protective gloves and goggles. Consult Safety Data Sheet.

- b. Quaternary Ammonium Compound (i.e., Virex-128) – mix one ounce per gallon. Product has high foaming characteristic. Staff may use D-Foam to control foaming. Protective gloves and goggles required. Rinse thoroughly with whirlpool use to avoid patient treatment irritation. Consult product label.
- c. Bleach – sodium hypochloride 5.25% – usual dose 4.5 – 5.0 oz. per 30 gallons with whirlpool treatment. Avoid higher concentrations; may cause skin irritation. Dilute bleach with water (1:10) as a disinfectant for blood and body fluid spills after cleaning has been completed. Gloves and goggles recommended.

In the event of an undesirable reaction with treatment chemicals, the Supervisor of Physical Therapy, patient's physician, and the Infection Control Practitioner should be notified so that a proper investigation may be conducted and appropriate intervention can be taken.

General Equipment Guidelines

All therapy equipment utilized during patient treatment should be cleaned following usage. In addition, Housekeeping personnel clean floors and carpets at least weekly.

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SPECIFIC PATIENT TREATMENT CONSIDERATIONS

1. Cleaning and Disinfecting of Treatment Tables (can use PDI sani-cloth wipes)

Treatment tables should be cleaned after each patient treatment and covered with fresh linen.

Procedure:

- a. Assemble gloves, basin, cloth and hospital approved disinfectant.
- b. Strip all linen from table and pillows.
- c. Place all articles in laundry bag.
- d. Scrub top of pad with hospital approved disinfectant; air dry.
- e. Wipe off pillows with hospital approved disinfectant; air dry.
- f. Dress table with fresh linen.

2. Care of Walkers, Canes, Crutches, Bars, etc. (can use PDI sani-cloth wipes)

Therapy equipment should be disinfected as indicated, but should be disinfected immediately after treatment if blood or body fluid contamination is suspected. Cleaning must be done prior to disinfection.

Requisites:

- a. Protective gloves
- b. Quaternary Disinfectant or 1:10 bleach and water
- c. Basin
- d. Cleaning cloth.

Procedure:

- a. Wipe each item with cloth dampened with quaternary disinfectant (1 ounce to a gallon) or 1:10 bleach and water solution. Clean off any dirt or debris first.
- b. Air dry
- c. Return to proper place
- d. Repeat daily if used.

3. Cleaning of Wheelchairs and Other Specialty Seating (can use PDI sani-cloth wipes)

All wheelchairs and Specialty Seating (seating created specifically for an individual patient) should be cleaned on a regular basis and when soiled with food or body fluids.

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Requisites:

- a. Protective gloves
- b. Disposable cloth
- c. Hospital approved disinfectant

Procedure:

- a. Wipe chairs with a damp cloth or a mild soap solution.
- b. Hospital approved cleaner is safe for upholstery and metal work.
- c. Vinyl pads can be cleaned by using a 1:10 bleach/water solution.
- d. Cloth covering may be washed in the washing machine on a gentle cycle with cold water temperatures.
- e. Air dry all parts of chairs.

4. Cleaning of Hydrocollator Packs and Machine

The following procedure is done periodically – approximately once a month and in the event of a silicone gel spill from a damaged pack.

Requisites:

- a. Protective gloves, eye protection, protective gowns
- b. Basins
- c. Cloths or sponge
- d. Quaternary disinfectant (1 ounce per gallon).

Procedure:

- a. Drain water from hydrocollator.
- b. Remove rack and packs from hydrocollator unit
- c. Insert packs into a plastic bag
- d. Remove residue from bottom of hydrocollator
- e. Rinse tank
- f. Scrub with mild abrasive cleaner to remove water line
- g. Wipe tank with phenolic disinfectant
- h. Rinse tank and fill with fresh water.

Packs:

- a. Inspect for oozing of silicon gel from packs daily
- b. Wipe packs and rack off with phenolic disinfectant
- c. Discard damaged packs.

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5. Cold Pack Usage

- a. Cold packs are stored in the Physical Therapy freezer. Cold packs should not have direct contact with the patient's skin. Moist towels should be applied directly to the area of the skin to be treated, then apply the pack. At the conclusion of the treatment, dispose of towels in the laundry bag.
- b. The cold pack should be wiped with a 1 ounce per gallon solution of quaternary disinfectant and returned to the freezer. Cold packs should not be applied to an infectious wound site, but may be applied over dressings if prescribed.
- c. Disposable cold packs should be thrown out after usage.

6. Cleaning of Whirlpools

Whirlpools are to be cleaned following each patient treatment. In the case of a "Sterile Whirlpool" tanks must be cleaned prior to and after the treatment.

Requisites:

- a. Gloves, eye protection, and protective gown
- b. Quaternary disinfectant
- c. D-Foam
- d. Sponge
- e. Hose
- f. 5-gallon bucket.

Procedure A: To be followed with use of all chemical agents except for Chlorazine.

- a. Drain water
- b. Spray all parts of tub with clear water
- c. Place 4-oz. quaternary disinfectant to a gallon of water into a clean bucket
- d. Add 1-2 oz. of D-Foam to control foaming
- e. Wipe tank surfaces, thermometer, and exterior surfaces of turbine with quaternary disinfectant
- f. Raise turbine and insert turbine into phenolic bucket. Run for one minute. Empty pail, fill with clear water, submerge, and run for one minute.
- g. Rinse tank and exterior surfaces of turbine
- h. Wipe dry.

Procedure B: To be followed with the use of Chlorazine Whirlpool Additive. Because of the chemical nature of the Chlorazine product, tank-cleaning procedure prior to a "Sterile Whirlpool" treatment is not necessary.

- a. Fill tank. Check for appropriate water temperature
- b. Add Chlorazine product at water level (20 grams per 30 gallons)

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- c. Turn turbine on for 3 minutes for turbine and tank disinfecting
- d. Treat patient
- e. Remove patient from the tank
- f. Run turbine for an additional 3 minutes for post treatment disinfecting of internal turbine parts
- g. Fill bottom of tank with 2 inches of water; add 4 ounce of quaternary disinfectant
- h. Wipe tank surface, thermometers, and exterior turbine surfaces
- i. Rinse tank
- j. Drain
- k. Wipe Dry.

7. Guidelines for Dressing Changes

To prevent infection, all patients with an open wound should have a sterile dressing. Physical Therapy staff will apply sterile dressings and any prescribed wound treatment following hydrotherapy treatment. Physical Therapy staff should refer to the Nursing Standard Procedure for Dressing Changes.

Requisites:

- a. Sterile gloves (shoulder length gloves are available for larger tub treatments)
- b. Plastic bags
- c. Sterile dressing set
- d. Tape (non-allergenic paper tape) to secure temporary dressing.

8. Equipment with Electrodes

The Physical Therapy Area utilizes surface electrodes for TENS and Electric Stimulation machines. The electrodes are for surface application only and should not be applied over open areas or infectious wound sites. Physical Therapy also uses one time use Iontophoresis pads. These pads are disposed of properly after Iontophoresis medication administration.

Requisites:

- a. Alcohol
- b. 4 x 4's
- c. Conductive electrode gel.

Procedure:

- a. Clean electrode site and electrode with alcohol wipes
- b. Attach electrode to adhesive pad or karaya pad
- c. If adhesive pad is used, apply conductive gel

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- d. Attach electrodes to patient
- e. Treat patient
- f. Remove electrodes following treatment
- g. Clean electrodes and treatment sites with alcohol wipes
- h. If karaya pads are used, remove pad from patient and electrodes and place into a plastic bag for reuse by the patient. Clean electrode with alcohol wipe.

9. Paraffin Bath Cleaning

Paraffin bath treatment utilizes a wax and mineral solution heated to 124-126° F to treat a variety of conditions that require heat.

- a. No patients with open areas, abrasions, broken skin, skin irritations, or skin infections should be permitted to use the paraffin bath.
- b. Patients must wash their hands before and after a paraffin treatment using a disinfectant soap.
- c. No jewelry is permitted in the bath.
- d. Discard paraffin used on patient after treatment.
- e. The reservoir of paraffin bath wax should be examined weekly. If dirt buildup is apparent, the wax should be changed in the following manner:
 - 1) Turn the unit off and allow the wax to set.
 - 2) Empty used wax into a plastic bag, tie and discard.
 - 3) Clean bath with alcohol and allow the paraffin bath to dry.
 - 4) Insert 6 pounds of new wax and turn unit on.
 - 5) Allow 7 hours for wax to thoroughly melt and check temperature calibration.

10. Other Specific Situations

I.V. Catheters, Indwelling Urinary Catheters, Tracheostomies, External Orthopedic Fixation devices, etc., should not be disturbed. Treatment practices should be modified to the limitations of the devices. Catheters should not be raised above the level of the bladder to avoid reflux into the bladder. Tracheostomies should not be disturbed unless emergency suctioning is required. Care should be used in handling patients with protruding internal fixation devices to avoid damage and misalignment of repaired structures.

11. Emergency Procedures

Emergency medical equipment for use in the event of a life-threatening situation is available on the crash cart in “Dog House” on the first floor of Page Hall. All patient treatment areas maintain Personal Protective Equipment Boxes with standard contents (masks, gloves, and gowns) and a pocket facemask for CPR.