



## CLINICAL POLICY

### Modalities

**A. EFFECTIVE DATE :**

April 7, 2021

**B. PURPOSE :**

To ensure infection prevention and safe use of common modalities used in the Department of Rehabilitation Services.

**C. POLICY :**

All modalities within the Department of Rehabilitation Services will be utilized and maintained per the manufacturer's instructions.

**D. SCOPE :**

This policy applies to inpatient and outpatient areas of the Department of Rehabilitation Services

**E. DEFINITIONS :**

A modality is a type of electrical, thermal or mechanical energy that causes physiological changes. It is used to relieve pain, improve circulation, decrease swelling, and reduce muscle spasm, in conjunction with other procedures.

**F. MATERIAL(S) NEEDED :**

Modalities as listed

**G. PROCEDURE :**

Rehab clinical staff will utilize and maintain each modality per the specific manufacturer's recommendations:

**I. CHILLING UNIT/FREEZER**

The chilling units will be utilized in accordance with the associated operating manual:

[http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual\\_for\\_pt\\_c\\_c2.pdf](http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual_for_pt_c_c2.pdf)

***If for whatever reason a unit is not working appropriately, it will be taken out of service and Clinical Engineering will be notified.***

**Cleaning of the ColPac Chilling Unit**

1. Remove cold packs from machine.
2. Turn off unit and unplug from power source.

3. Raise the lid and keep open to speed defrosting. A small amount of warm water can be poured over the refrigeration coils to speed defrosting.
4. Move unit to a floor drain or attach the extension cord to the lower, back side of the unit to drain into a sink.
5. Open the bottom drain valve.
6. Allow the unit to defrost completely. All excess water must be removed from the chilling chamber before the unit is started again.
7. Wipe down the inside of the unit with a clean towel or cloth.
8. Close the bottom drain valve, detach the hose if necessary.
9. Clean the outside of the unit with stainless steel cleaner and polish.
10. Plug the unit back into the power source and turn on.
11. Clean the cold packs with alcohol and return to the unit.
12. Close the lid so that the chilling sequence can begin.

### **Documentation of Temperature and Cleaning**

- The Colpac chilling unit will be cleaned on a monthly basis or more, depending on the build-up of frost. The Nayden patient care freezer will be cleaned quarterly or more, depending on the build-up of frost. Cleaning of the both unit will be documented on the *Cold Pack Cleaning Log*.
- The temperature of the unit should be between 10 and 21 degrees Fahrenheit. Temperatures will be recorded daily on the *Cold Pack Daily Temperature Log*.
- If the temperature of the unit falls out of the standard range, adjustments may be made on the lower back side of the unit. If still unable to correct temperature, the unit will be taken out of service and Clinical Engineering will be notified.

### **Use/Care of Reusable Cold Packs**

ColPacs will be used according to the manufacturer's instructions:

[http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual\\_for\\_pt\\_c\\_c2.pdf](http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual_for_pt_c_c2.pdf)

Performance Health reusable cold packs:

[https://www.performancehealth.com/amfile/file/download/file\\_id/9554/product\\_id/133501/](https://www.performancehealth.com/amfile/file/download/file_id/9554/product_id/133501/)

### **RELATED POLICIES:**

<https://health.uconn.edu/pharmacy/>

## **II. FORMA-SPLINT THERMAL BATH**

The Forma-Splint Thermal Bath will be utilized in accordance with the associated operating manual:

<https://www.whitehallmfg.com/uploads/fileLibrary/6900-101-000.pdf>

***If for whatever reason the unit is not working appropriately, it will be taken out of service and Clinical Engineering will be notified.***

### **Cleaning of Form-Splint Thermal Bath**

The Forma-Splint Thermal Bath will be cleaned in accordance with the associated operating manual:

<https://www.whitehallmfg.com/uploads/fileLibrary/6900-101-000.pdf>

1. Turn off unit and unplug from the power source.
2. Allow water to cool.
3. Slip the clear tube provided with the unit over the drain spout, open the valve, and drain the water into a bucket, sink, or drain.
4. When the water has been fully drained, use a “Lime-A- Way” product to remove calcium and mineral build up in the unit, or use a strong solution of vinegar and water and let stand for approximately 5 minutes.
5. If necessary, use a thin solution of Bon-Ami and water and a low abrasion scouring pad. DO NOT USE A METAL SCOURING PAD AS IT WILL CAUSE RUST TO BUILD UP. ALSO, DO NOT USE BLEACH OR IODINE BASED PRODUCTS, AS THEY WILL CORRODE THE STAINLESS STEEL.
6. Rinse with clean, warm water and wipe dry.
7. Polish with a stainless steel polish.
8. Fill the unit with at least 3 inches of water. It is recommended that de-ionized water be used to reduce the amount of cleaning necessary.
9. Plug the unit into the power source.
10. Set the thermostat to medium heat, which will approximate to 170 degrees Fahrenheit. With 3 inches of water and the cover closed, operating temperature should be reached in approximately 90 minutes.
11. Temperature may be adjusted (from 150 – 190 degrees Fahrenheit) to conform to particular requirements using the dial on the front of the machine.

### **Documentation of Cleaning**

Draining and cleaning of the Forma-Splint Thermal Bath will be completed on a monthly basis, or sooner if visibly required, and logged on the *Splint Pan Draining and Cleaning Log*.

### **III. GAME READY**

**User Manual:** <https://www.gameready.com/wp-content/uploads/2017/06/703758-Rev-N-GR21-CU-Users-Manual-English-2.pdf>

When you are done using the system for the day:

- a. Unplug the AC Adapter and the Connector Hose from the Control Unit.
- b. Push the door release button to open the door.
- c. Carefully pour out the ice and water.
- d. Wipe off any excessive water.
- e. Store the control unit with the lid fully open to allow the interior to dry and preserve the reservoir seal
- f. If desired, the system (Control Unit, Hoses, and Wraps) can be flushed with a mixture of isopropyl alcohol and water, and run on no compression (“off”). This should be followed by running the Control Unit with clean water only on the no compression (“off”) setting.

Wraps will be cleaned with hospital sanitizing wipes per container instructions prior to use with each patient.

### **Reservoir Inspection**

- g. The reservoir filter should be inspected\*, cleaned, and/or replaced as necessary
- h. Identify the filter within the ice reservoir.

- i. Using 2 fingers, grasp and squeeze the two protruding prongs.
- j. Slide the filter out.
- k. Rinse debris from the filter and be sure there are no obvious signs of damage.
- l. ***If you have questions or would like to order a new filter, call Game Ready Customer Service at 1 888 426-3732.***
- m. To replace the filter, or install a new filter, first ensure that the filter is oriented properly with the plastic tab facing up. If the filter is not orientated properly, the protruding tab will prevent the filter from sliding back into place.
- n. You will feel and hear the filter snap back into place.

**\*See Reservoir Filter Inspection Log**

#### **IV. HYDROCOLLATOR**

The Hydrocollator will be utilized in accordance with the associated operating manual:

<https://www.medwrench.com/documents/view/7553/chattanooga-2402-hydrocollator-m-2-operation-manual>

***If for whatever reason the unit is not working appropriately, it will be taken out of service and Clinical Engineering will be notified.***

#### **Cleaning of the Hydrocollator**

1. Turn off and unplug the unit from the power source.
2. Remove hot packs and racks from the unit.
3. Move the unit to a floor drain or attach the extension hose to the lower, back side of the unit to drain into a sink.
4. Open the drain valve with the green handle, located on the lower, back, inside of the unit to drain the water.
5. After all the water has been drained, rinse the interior of the unit with water and wipe down the interior surface and internal parts with a mild disinfectant or low abrasive bathroom cleaner (low chlorine product).
6. If "hard water" salt deposits are found on the interior of the unit, use a strong solution of vinegar and water (1:1 ratio) to dissolve the deposits and rinse away.
7. To clean the stainless steel exterior, use stainless steel cleaner and polish. **DO NOT USE STEEL WOOL OR ABRASIVE CLEANERS**, which will disturb the grain of the finish.
8. Close the drain valve and detach the extension hose, if necessary.
9. Return the hot packs and racks to the unit.
10. Fill the unit with fresh water, making sure that the water level is ABOVE the steam packs in order to avoid burning or scorching the packs.
11. Plug the unit back into the power source and turn switch to "on".

#### **Documentation of Temperature and Cleaning**

- The Hydrocollator will be drained and cleaned every 2 weeks, as documented on the *Hyrocollator Cleaning Log*
- Temperature readings will be recorded on a daily basis in the *Hot/Cold Pack Log* (see attached). Temperatures should be between 160-166 degrees Fahrenheit per the manufacturer's manual.

- If the temperature of the unit falls out of the standard range, adjustments may be made using the dial on the lower, back side of the unit. If still unable to correct temperature, the unit will be taken out of service and Clinical Engineering will be notified.

### **Use of Hydrocollator Packs**

Hydrocollator Packs will be used according to the manufacturer's instructions:

<https://www.activeforever.com/content/manuals/hotpac.pdf>

- [At least 6 – 8 layers of dry toweling should cover the HotPac before placing on skin](#)
- [To vary the heat intensity, increase or decrease the number of toweling layers as appropriate](#)
- [Provide the patient with a call system](#)
- [Check skin condition and general physiologic response throughout treatment.](#)

### **V. PARAFFIN**

The paraffin bath will be utilized in accordance with the associated operating manual. Refer to Whitehall Manufacturing - Dickson Paraffin Bath – Model PB-105 Manual for Instructions/Operations/Care:

<https://www.whitehallmfg.com/uploads/fileLibrary/6900-189-000%20Dickson%20Paraffin%20Bath.pdf>

***If for whatever reason the unit is not working appropriately, the unit will be taken out of service and Clinical Engineering will be notified.***

Staff must be aware of the indications, contraindications, and precautions in use of paraffin:

#### **Indications:**

- Subacute and chronic traumatic and inflammatory conditions
- Muscle relaxation
- Joint stiffness

#### **Contraindications:**

- Acute inflammatory conditions
- Open wounds
- Malignancies
- Active bleeding
- Cardiac insufficiency
- PVD
- Tissues that are devitalized by X Ray therapy
- The very old or very young patient who may have unreliable thermoregulatory systems

#### **Precautions:**

- Existing edema
- Sensory loss
- Confused patient

***For all methods of delivering paraffin bath:***

1. Check for skin integrity and temperature sensation
2. Confirm that the temperature of the bath is within the acceptable range of 126 – 132 degrees F.
3. Instruct the patient in what you are going to do, what to expect from treatment, and what is expected of them
4. Appendage to be treated must be thoroughly washed with an antimicrobial soap and dried.

**DIP IMMERSION BATH METHOD:**

1. Immerse the appendage in the bath ***without touching the bottom of the unit***, and quickly remove so that a thin coat of paraffin congeals and adheres to the skin.
2. Repeat the procedure until a “glove” of paraffin is of sufficient thickness to allow the patient to keep the appendage immersed in comfort
3. After the glove is formed, the appendage should be immersed in the bath as follows:

a. Fingers	10 minutes
b. Hands	10-15 minutes
c. Arm	15-20 minutes
d. Foot	30-45 minutes

4. Discard the used paraffin at the conclusion of the bath
5. Check skin integrity

**GLOVE METHOD:**

1. Follow steps # 1 & 2 above
2. Repeat the process 6 – 12 times so that a glove of solid paraffin is formed
3. Instruct the patient not to crack the solid paraffin
4. Quickly wrap the appendage in waxed paper or plastic wrap, and then in several layers of towel and secure. Thick insulation on all surfaces will optimize heat retention
5. The glove may remain in place for 20 minutes
6. Discard the used paraffin and wrap
7. Check skin integrity

**Sanitization/Cleaning of the Paraffin Bath**

The paraffin bath is sanitized each day per manufacturer’s instructions. If there is a noticeable amount of sediment that has accumulated in the bottom of the bath, cleaning will be performed per the manufacturer’s instructions:

<https://www.whitehallmfg.com/uploads/fileLibrary/6900-189-000%20Dickson%20Paraffin%20Bath.pdf>

**Documentation of Temperature/Sanitization/Cleaning**

Daily logs will be maintained to reflect appropriate temperature ranges, sanitization, and cleaning schedules.

See Paraffin log sheets.

**VI. THERMOTHERAPY DRY HEAT (Fluidotherapy)**

The Thermo Therapy Dry Heat Therapy will be utilized in accordance with the associated operating manual:

<https://www.whitehallmfg.com/uploads/fileLibrary/6904-001-000%20Thermo-Therapy.pdf>

***If for whatever reason the unit is not working appropriately, it will be taken out of service and Clinical Engineering will be notified.***

### **Maintenance of the Thermo Therapy Dry Heat Therapy**

**\*Turn off and unplug the unit from the power source for all maintenance\***

#### **Weekly Maintenance**

1. The housing may be cleaned with a mild household cleaner.
2. Clean sleeves:
  - a. To remove the sleeves, carefully pull the bottom of the rims toward the center away from the side and at the same time pull or push them up and out of the housing. Then pull the sleeves from the Velcro found underneath the rim.
  - b. Launder the sleeves in a mild antibacterial detergent. Allow the sleeves to air dry or dry on low temperature settings. Drying the sleeves in high temperatures could cause the sleeves to shrink or become distorted resulting in the sleeve(s) not properly fitting when placing them back onto the unit.
  - c. Replace the sleeves in reverse order from above, making certain the corners are well seated to form the seal required to prevent excessive escape of Cellex medium.
3. Check levels of Cellex medium.
  - a. Contact Clinical Engineering if additional Cellex needs to be added

#### **Biannual Maintenance**

1. Completed at the discretion of Clinical Engineering:
  - a. Change Cellex Medium as needed
  - b. Clean/change filter as needed

#### **Annual Maintenance**

1. Completed at the discretion of Clinical Engineering:
  - a. Internal Cavity inspection
  - b. Intake Filter replacement
  - c. Functional and Performance Tests, and Distributor replacement, if needed
  - d. Blower motor inspection, and replacement if needed
  - e. Calibration

#### **Documentation of Cleaning**

Maintenance and cleaning of the Thermo Therapy Dry Heat Therapy will be documented per log sheets.

#### **H. REFERENCES :**

- Chilling/Freezer Units and Accessories  
[http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual\\_for\\_pt\\_c\\_c2.pdf](http://www.wemed1.com/downloads/dl/file/id/6888/product/4305/manual_for_pt_c_c2.pdf)
- Formasplint Thermal Pan  
<https://www.whitehallmfg.com/uploads/fileLibrary/6900-101-000.pdf>
- Game Ready  
<https://gameready.com/wp-content/uploads/Game-Ready-GRPro2.1-UM-EN-703758.pdf?>

- Hydrocollator and Accessories  
<https://www.medwrench.com/documents/view/7553/chattanooga-2402-hydrocollator-m-2-operation-manual>
- Paraffin Bath  
<https://www.whitehallmfg.com/uploads/fileLibrary/6900-189-000%20Dickson%20Paraffin%20Bath.pdf>
- Thermo Therapy – Dry Heat Therapy  
<https://www.whitehallmfg.com/uploads/fileLibrary/6904-001-000%20Thermo- Therapy.pdf>
- Ultrasound/Electical Stimulation Combination  
<https://www.djoglobal.com/sites/default/files/Vectra%20Genisys%20IFU.pdf>
- Ultrasound Gel
  - Statement from the Aquasonic Gel company: “Since there is no effective way to determine whether an opened bottle of gel has been contaminated general guidelines are that gel should be marked to expire 28 days after opening. Using a warmer for the gel does not impact the expiration time.”

<https://aquasonicgel.com/blog/shelf-life-and-storage-of-aquasonic-ultrasound-transmission-gel/>

**I. SEARCH WORDS :**

Modalities, Chilling/Freezer Unit, Formasplint Thermal Pan, Game Ready, Hydrocollator/Accessories, Paraffin Bath, Thermo Therapy – Dry Heat Therapy, Ultrasound/Electrical Stimulation, Ultrasound Gel

**J. ENFORCEMENT:**

Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, other applicable University Policies, or as outlined in any procedures document related to this policy.

**K. STAKEHOLDER APPROVALS :**

On File

**L. COMMITTEE APPROVALS :**

None



**M. FINAL APPROVAL :**

- |  |                           |
|--|---------------------------|
| 1. <u>Andrew Agwunobi, MD (Signed)</u><br>Andrew Agwunobi, MD, MBA<br><b>UConn Health Chief Executive Officer</b>              | <u>04/13/2021</u><br>Date |
| 2. <u>Anne Horbatuck (Signed)</u><br>Anne D. Horbatuck, RN, BSN, MBA<br><b>Clinical Policy Committee Co-Chair</b>              | <u>04/07/2021</u><br>Date |
| 3. <u>Scott Allen, MD (Signed)</u><br>Scott Allen, MD<br><b>Clinical Policy Committee Co-Chair</b>                             | <u>04/09/2021</u><br>Date |
| 4. <u>Caryl Ryan (Signed)</u><br>Caryl Ryan, MS, BSN, RN<br><b>VP Quality and Patient Services &amp; Chief Nursing Officer</b> | <u>04/08/2021</u><br>Date |

**N. REVISION HISTORY :**

Date Issued: 02/13/2020

Date Revised: 03/19/2021

Date Reviewed: 04/7/2021