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| **University of Washington,** **Harborview Medical Center****325 9th Ave. Seattle, WA, 98104****Transfusion Services Laboratory****Policies and Procedures Manual** | **Original Effective Date:**August 15, 2013 | **Number:** **3015-1** |
| **Revision Effective Date:** | **Pages:**  |
| **TITLE:** Calibrating Thermometers Using NIST Traceable Thermometer |

**PURPOSE**

To provide instruction for the calibration of thermometers used in the HMC Transfusion Service lab, using a NIST (National Institute of Standards and Technology) traceable thermometer.

**POLICY**

All thermometers in the HMC TSL are calibrated against an NIST traceable thermometer prior to being place into use, and annually thereafter.

**PROCEDURE**

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| **Step** | **Action** | **Related Documents** |
| 1. | Check NIST Thermometer for cracks or defects. Do not use if either are discovered. |  |
| 2. | Document the NIST number on the Thermometer Calibration Form. | Thermometer Calibration Form |
| 3. | Two calibration points are required. Choose two from the points listed on the NIST certificate.* One point within the range required for the use intended.
* One point higher or lower than the usage range.
* Note: (If 0°C. is chosen, (Use an ice bath to obtain the 0°C calibration point)
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| 4.  | * Place the NIST thermometer and the thermometer being calibrated together at the temperature point being tested, and repeat the following steps for each temperature point.
* Allow the temperature in both thermometers to equilibrate for at least 5 minutes.
* Record the readings from both thermometers in the appropriate column of the Thermometer Calibration Form.
* Record the NIST correction factor for the temperature point being tested in the appropriate field of the Form.
* Create a tag stating the correction factor for the time range being utilized, and attach it to the top of the newly calibrated thermometer.
* Complete the Calibration Form and leave for manager review.
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**References**

AABB Technical Manual, Current Edition