**Policy Statement**

The University of Toledo Medical Center Laboratories has a system to monitor temperature of equipment and devices for storage of critical materials.

**Purpose of Policy**

To assure critical materials are stored properly and significant temperature problems are promptly identified and corrected and documentation of corrective action is maintained for regulatory purposes.

**Procedure**

1. All refrigerators, freezers and incubators used for storage of critical materials (specimens, reagents, media, blood and blood products) will have a continuous monitoring and alert system to identify situations when temperature ranges are exceeded. The system will provide timely alerts to enable corrective action and preserve the integrity of the contents.

2. All units monitored for temperature are identified by Asset Type, Location and TD tag number.

3. Automatic alert notifications will be sent to the text pager in the Chemistry area (419.218.5237) if temperature limits are exceeded for 30 minutes. Automatic alert notifications will be sent to the text pager for Blood Bank (419.218.5238) if temperature limits are exceeded for 15 minutes. The designated lead technologist for the department owning the asset should be notified and respond with acknowledgment of the alert and documentation of the corrective action.

4. If temperature of the unit does not respond to corrective action and thermometer readings show temperature still out of range after 60 minutes (30 minutes for Blood Bank assets), the alert will be escalated to the appropriate contact in Lab Administration and/or Facilities Maintenance. Remove contents and store in a unit with the same temperature range. Take the Awarepoint® Temperature Device “Out of Service” to prevent further alerts.
5. In the event the Awarepoint® system fails, the laboratory will monitor refrigerators, freezers and incubators with a downtime back-up method of NIST-traceable thermometers and daily recording of temperatures on a temperature log. Blood Bank will continue to use temperature chart recorders on each unit designated for storage of blood and blood products. See UTMC policy 3364-108-201 and 3364-108-202.

6. Awarepoint® is responsible for providing the necessary documentation for temperature device calibration and verification.

7. Lab Administration is responsible for configuration of individual temperature devices and setting temperature limits for each device based on contents and regulatory standards. General Ranges Alert Notification delay for each asset type are listed below.

<table>
<thead>
<tr>
<th>Asset type</th>
<th>Temperature Range</th>
<th>Alert notification delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Refrigerator</td>
<td>2C – 8C</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Laboratory Freezer</td>
<td>-30C - -10C</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Laboratory Incubator</td>
<td>28C – 38C</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Blood Bank Refrigerator</td>
<td>1C – 6C</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Blood Bank Freezer</td>
<td>Below -18C</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

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Approved by:

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Michelle Bartkowiak- Manager, Lab

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Policies Superseded by This Policy: