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Owner: Kelly Cwikla: Mgr-Lab
Area: Laboratory - General Laboratory
References:

Thermometers and Temperatures

Binghamton, New York

Regulatory References:	Cross References:
CAP.COM.04200 CAP.COM.30350, CAP.GEN.41042	

Policy:

To ensure specimens, reagents and other laboratory supplies are stored appropriately and for quality control purposes, temperatures for refrigerators, freezers, room, incubators, instruments, etc will be monitored daily.

- All refrigerators, freezers, incubators and room temperature measuring is monitored and recorded in the LABGUARD system.
- All temperature dependent instruments are continually monitored by the instrument
- Heat blocks/water baths are monitored with thermometers and recorded either daily or with each use

The Labguard software or paper chart will state the acceptable temperature range for the device or temperature being monitored. Temperatures must be within the stated range. If temperatures are not within their stated range, follow procedure stated below for troubleshooting. Temperature charts are monitored and initialed monthly by department manager or designee.

PROCEDURE

1. LABGUARD

- All refrigerators, freezers, incubators and room temperatures are continually monitored by LABGUARD probes and recorded in the LABGUARD software.
- The range of acceptability for each temperature is defined in the LABGUARD software
- Temperatures are recorded at least every 2 hours. Devices in the blood bank and microbiology incubators need more frequent monitoring and each device will be set per specification.
- On a monthly basis, the manager will review all temperatures in the LABGUARD software and sign off.
- When a reading is out of the acceptable range, the LABGUARD transmitter on the device will flash yellow to warn the user of the deviation

- f. When a reading has been out of the acceptable range for an elongated period of time as defined in the software, the transmitter on the device will flash red. An email will also be sent to the manager of the department and any other personnel that has been defined in the software
- g. Troubleshooting for yellow warnings: Determine which device has the warning and take measures as needed. Shutting refrigerator or incubator door, or adjusting the thermostat. Continue to monitor until that the yellow light flash warning subsides.
- h. Troubleshooting for red warnings: Determine which device has the warning and take measures as needed. Make the appropriate adjustments and review the temperature again in 30 minutes. If the adjustments are taking effect, keep monitoring at 30 minute intervals until the temperature is in the correct range. If the adjustments are not taking effect, contact facilities for refrigerators and biomed for incubators to assist with repair. Move any temperature dependent items to another refrigerator or incubator until the situation is remedied. Notify manager of any issues and actions.
- i. The manager or designee will comment in the LABGUARD system any actions and information about the deviations as needed.
- j. LABGUARD probes are calibrated annually. Certificates are kept in a binder in microbiology.
- k. If there is an issue with the LABGUARD software, paper charts and traditional thermometers can be used as a backup system.

2. Traditional Thermometers

- a. All heat blocks/water baths that are monitored with traditional thermometers have readings that are recorded daily or with each day of use.
- b. The range of acceptability for each temperature is defined on the log sheet for the device
- c. On a monthly basis, the manager will review all temperatures on the log sheet and sign off.
- d. When the reading is out of range of acceptability, make any necessary adjustments and check temperature again in 30 minutes. If the temperature corrects, record the new temperature, action and initials on the log sheet.
- e. For temperatures out of control that do not correct with adjustment, call Biomed or log a request online to assist with repair.
- f. Do not use device until issue is resolved. Notify manager or designee of issue and actions taken.
- g. For room temperatures that are out of range, contact the facilities department to assist in heating or cooling the area.
- h. The traditional thermometers from are calibrated using the NIST thermometer. The NIST thermometer is kept in the microbiology department with a certificate of certification/calibration. Traditional thermometers are calibrated at least annually or can be replaced for new thermometers with a current certificate of calibration.
- i. Any calibration records for these thermometers are to be kept in the appropriate department and initialed by the manager or designee.

3. Disposable Thermometers

- a. Room temperatures, Refrigerators or other devices may also be monitored using disposable thermometers.
- b. Disposable thermometers are acceptable for use until the expiration date on the thermometer or on the calibration certificate.

- c. Once the thermometer has expired, it must be discarded and replaced with a new one. Under no circumstances can a disposable thermometer be calibrated and used past the expiration date.
 - d. Calibration certificates will be kept in the appropriate department and initialed by the manager or designee.
4. For temperature dependent instrumentation:
- a. All temperature dependent instrumentation is continually monitored within the instrumentation.
 - b. The range of acceptability is defined on any log sheets or in the instrument software.
 - c. The instrument will alarm when the temperature is outside of defined parameters.
 - d. Notify manager/supervisor of situation
 - e. Notify instrument support of situation and follow their instructions. Document on temperature chart all corrective actions taken.
 - f. Per instrument support recommendations, either do or do not continue patient testing.
 - g. Depending on action taken, QC may need to be performed and accepted before patient testing can resume.

Electronic Authorizations:

Michael Zur, MD, Medical Director of Laboratory

Lina Ramli, MSM,BS,MT(ASCP), Administrative Director of Laboratory

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
	Michael Zur	12/2021
	Kelly Cwikla: Mgr-Lab	12/2021