**TITLE: Chemistry Downtime**

## PRINCIPLE: This procedure provides guidance to varied downtime situations that could occur. These guidelines ensure timely workflow and reporting of patient results for short and long-term Hospital Information System (HIS) downtime, LIS-HIS Interface downtime, Wireless Communication Downtime, SoftID Downtime, or LIS Downtime (Scheduled and Unscheduled)

**PERSONNEL:** All Laboratory Staff

**STEPWISE PROCEDURE:**

## NOTIFICATION:

## Unscheduled: Laboratory personnel will immediately notify the IS Help Desk, LIS Analyst, Senior Technologist(s), or the Laboratory Manager, of any unscheduled LIS down conditions. The IS Help Desk will notify all areas of the hospital to follow downtime procedures.

**Scheduled**: The LIS Analyst will notify the IS Help Desk of any scheduled LIS downtimes. The IS Help Desk will communicate to all areas of the hospital regarding the scheduled downtime approximately 2 weeks in advance. Prior to the start, the IS Help Desk will send a notice that the applicable systems are going down and to follow downtime procedures

**A LIS IS UP, HIS IS DOWN**

1 .Testing in Chemistry is not affected by this type of downtime. After the specimens are collected and received we run as usual on the instruments or manual testing.

2. Any required calls will still be made.

3. All results will be available in navigator.

**B. INTERFACE BETWEEN LIS AND HIS IS DOWN:**

1 .Testing in Chemistry is not affected by this type of downtime. After the specimens are collected and received we run as usual on the instruments or manual testing.

2. Any required calls will still be made.

3. All results will be available in navigator.

**C. INTERFACE ENGINE IS DOWN:**

1 .Testing in Chemistry is not affected by this type of downtime. After the specimens are collected and received we run as usual on the instruments or manual testing.

2. Any required calls will still be made.

3. STAT results will be called, faxed and/or tubes to the floors immediately after completion.

4. Routines will be resulted and cross to the HIS when the system is operational.

**D. LIS IS DOWN – SCHEDULED AND UNSCHEDULED or ALL SYSTEMS DOWN**

1. 15 minutes before the start of the scheduled downtime print 2 pendings:

* 1 for specimens not received
* 1 for specimens not collected.

1. During an unscheduled downtime, preprinted labels will be used.
2. After the specimens are logged in on the downtime logs, Chemistry should receive the tube with the downtime label on it plus 2 extra downtime labels.

* 1 for the result sheet
* 1 extra if needed.

1. Manually program the instruments to run the appropriate tests. Use the downtime number as the Sample ID, enter the Tray and Cup number. If the specimen is a Green/Yellow tube please change the Specimen to PLASMA before ordering the appropriate tests.

Please type in the name of the patient in the” Edit Patient Data” icon. Please enter the unit and room number on the patient data screen.

1. When the result prints out, examine the printout out for any result that requires a call.

* Some of the Criticals will be marked with the code >SR in front of the results.
* Document any calls on the instrument printout so they can be entered into the LIS.
* The reference ranges programmed are the adult male.

1. Reprint a Patient Report of the results from the Vitros for any STAT or Criticals.
   * Highlight the Patient under Results
   * Click on “Set Report Status”
   * In “Set Report Status” change the “Patient “ from “No Action” to “Send”
   * Hit OK.
   * When the report prints, fax or tube the results to the appropriate unit.
2. Manual testing result entry.

* See attached worksheet.
* Use one sheet per patient.
* Use manual testing worksheet to document QC for later entry.

1. Run QC using the barcodes as usual. The Vitros has the correct ranges for the QC programmed in them, so you will know if the Controls are OK.

**E. RECOVERY**

* Lab Departments will be notified and provided labels when all orders have been placed and the downtime log is completely reconciled.
  + **Note: Only barcodes which were preprinted as downtime barcodes can be assigned to a specimen later at recovery. The system will not allow you to assign any barcode out of the downtime range or not printed.**
  + Bring up the patient in Order Entry
  + Go to the Specimen Tab
  + Right click in the Specimen Barcode box and choose “Replace”.
  + Scan the **downtime number** barcode in Replace Field.
  + Click Ok
  + The Instrument Menu will have the recovery order number and the downtime barcode number for each sample.
* Departments should launch their interfaced instruments. The instrument menu should populate with patient demographics and the results will populate in the LIS after retransmitting.
* Enter manual results and all RBTO (Call) documentation.
* The QC results will be transmitted to SOFT when the interface is back up.
* Check your Pending reports to make sure all samples/results have been accounted for.

**F. DOWNTIME FOR QUALITY CONTROL**

Since our QC only goes between the instruments and the LIS our only real Downtime will be if SOFT is down.

1. We keep our Control values up to date in the instruments at all times. If we make a change in the LIS we also make a change in the 5600 QC Files.

2. We use barcodes to run our QC or we can manually program them on the 5600.

3. Since the ranges are in the instrument, the tech will know immediately if the QC is good or not and can take any appropriate action that is required.

4. Manual chemistry tests have a log sheet with the current acceptable control ranges/results.

5. When the LIS is back up, we will retransmit the QC to the LIS and then follow our procedures for posting/verifying results in the instrument menu.

6. Depending on the time that the LIS goes down, the scheduler may not have produced the orders for our QC. When we post/verify the Control in the instrument menu, the TQC Module will then produce the orders for that QC material.

7. For manual tests, we will need to wait until the specimens have been collected and received before resulting in the worklist.

**Manual Test Result**

|  |  |  |
| --- | --- | --- |
| **TEST** | **Reference Range** | **Patient Results** |
| **Osmolality** |  |  |
| **Serum** | 0-3 Mo. 275-295 mOsmo/KG |  |
| **Serum** | >3 Mo. 280-300 mOsmo/KG |  |
| **Urine** | 300-1300 mosm/KG |  |
|  |  |  |
| **Ketone** | Negative |  |
|  |  |  |
| **Body Fluid pH** | None Established |  |
|  |  |  |
| **Procalcitonin** | 0-0.10 ng/mL |  |
|  |  |  |

**NOTE:** Please put a label on the sheet with the patient’s information.

Use a sheet for each patient.