

## PROCEDURE OF SCID SCREENING TEST FOR THE STATE OF LOUISIANA

### Site of Louisiana Newborn Screening Laboratory at Office of Public Health

1. Receive samples in the Louisiana Newborn Screening Laboratory daily.
2. Review all samples and determine acceptability for analysis.
3. Assign a unique eleven digit barcode identification accession number to each sample.
4. Punch one 1/8" dried blood spot sample into the Wisconsin Newborn Screening Lab supplied PCR plate(s) starting with well B3 and ending with well H11 using the Perkin Elmer Multi-Puncher. Leave all wells on row A, and wells B1 & B2 blank, these positions are for calibrators and controls for the TREC assay.
5. Punch one **NTC (No Template Control)** into well H12 of a full plate, or the last well of a partial plate.

**Note: 1. A partial plate should contain no less than 45 specimens.**

**2. The samples with TREC blow the cutoff value will be re-punched in duplicates in a separate plate.**

6. When punching is complete verify that each sample well contains a dried blood spot.
7. Place a PCR strip snap cap in each well of the TREC assay plate to keep the blood spots from coming out of the wells.
8. Place each of the TREC punched plates into a FedEx box for shipment.
9. Ship the FedEx box with punched plates to the Wisconsin State Laboratory for next day delivery.
10. Export the punched data file from the Louisiana Newborn Screening LIMS system into the TREC Excel plate map and demographic worksheet. Verify all data is correct.
11. Email the matching plate map and demographic worksheet file for the day's samples to Wisconsin State Newborn Laboratory daily.

### Site of Newborn Screening Laboratory at Wisconsin State Laboratory of Hygiene

1. Process LA specimens for TREC assay following the standard operation procedure on the day they are received.
2. Send TREC assay results back to Newborn Screening Laboratory at Office of Public Health daily with list of samples that must be re-punched.

3. Communicate “inconclusive” screening results to Stacy Valley at LSU Children’s Hospital electronically.
4. Communicate “abnormal” screening results to Stacy Valley at LSU Children’s Hospital orally followed by an electronic communication confirmation.
5. Enter the TREC assay data to SCID Workgroup database.

**Site of LSU Children’s Hospital**

1. Report “inconclusive” screening results to primary care providers and arrange to have a repeat newborn screening specimen sent to Louisiana Newborn Screening Laboratory.
2. Report abnormal screening results to primary care providers and immunology specialists, and arrange further confirmatory evaluation.
3. Provide confirmatory diagnosis results to Wisconsin Newborn Screening Laboratory to complete the record.

**Note: A General Clinical Guideline is attached.**