ELR Connecticut Department of Public Health
Electric Laboratory Reporting Checklist

This checklist will prepare you to fulfill electronic laboratory reporting (ELR) interoperability with the Connecticut Department of Public Health (CTDPH) and begin the process of onboarding for ELR. Please contact the dph.elr@ct.gov mailbox for additional assistance.

Step 1: Complete ELR Registration		
	Yes	**Comments & Resources**
Contact CTDPH at dph.elr@ct.gov or go to CTDPH ELR webpage (link below) to obtain the ELR Registration Form. Complete and return to CTDPH.	☐	REQUIRED FOR ELR ON-BOARDING. For Eligible Hospitals under Promoting Interoperability (MU), this satisfies the Registration Active Engagement Option. Note: Only eligible hospitals (EH/CAH) as defined under MU will get this credit (not providers).
Step 2: Obtain Necessary Documentation for ELR Implementation		
	Yes	**Comments & Resources**
All documents available at the CTDPH ELR webpage: https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Electronic-Laboratory-Reporting		
Download the HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health (US Realm) Release 1 including errata.	☐	Available for download from the CTDPH ELR website.
Download the CTDPH ELR Local Implementation Guide for HL7 2.5.1.	☐	Available for download from the CTDPH ELR website. NOTE: if not using HL7 2.5.1 you must contact the CTDPH ELR team for additional instructions and guidelines.
Download the CTDPH current list of laboratory reportable findings.	☐	A link to this year's Reportable Laboratory Findings is on the CTDPH ELR webpage.
Step 3: Incorporate and Validate Standard Vocabulary		
	Yes	**Comments & Resources**
Map local codes to the Logical Observation Identifiers Names and Codes (LOINC) for laboratory orders and tests performed.	☐	Reference materials are available from the following websites: LOINC: http://loinc.org Search LOINC terms at: search.loinc.org
Map local codes to the Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) for laboratory results and specimen types.	☐	SNOMED-CT: https://www.nlm.nih.gov/research/umls/Snomed/snomed_main.html (has information on how to register for ULMS to access their SNOMED-CT browser).

Map other local codes according to the implementation guide to standard codes, e.g., HL7 defined tables (race, ethnicity, gender, etc.) & UCUM (measurement units).	☐	Public Health Information Network Vocabulary Access Distribution System (VADS) & Reportable Condition Mapping Table: https://phinvads.cdc.gov
Share and verify standardized codes, e.g., LOINC and SNOMED CT, with CTDPH ELR staff.	☐	This is part of the larger ELR process with CTDPH. At this point, if both the laboratory and CTDPH agree, Eligible Hospital labs will be considered in the Testing and Validation Active Engagement Option for Meaningful Use. Please see the Meaningful Use (MU) link for the official state letters regarding MU.
Step 4: Develop HL7 Version 2.5.1 ORU Message for ELR to Public Health		
NOTE: Steps 4 and 5 can be done concurrently with mapping (Step 3).		
	Yes	**Comments & Resources**
Develop messages in conformance with the CTDPH ELR Local Implementation Guide for HL7 2.5.1.	☐	
Step 5: Set Up Secure Message Transport		
	Yes	**Comments**
Contact CTDPH to request information on PHINMS through dph.elr@ct.gov.	☐	CTDPH will send information on how to set up PHINMS with the CDC RnR hub. A link to further information on the use of PHINMS with CTDPH is on the ELR webpage (link above).
Test the secure connection with CDC and CTDPH.	☐	Note: both a testing (staging) and a production connection will be needed.
Step 6: Perform HL7 Message Validation		
	Yes	**Comments & Resources**
Test ELR messages against the NIST ELR HL7 2.5.1 validator by sending a de-identified message to the ELR team. Feedback on message structure issues will be sent back to the laboratory.	☐	CTDPH has worked with NIST to obtain a CT-specific validator. This validation is highly recommended. The ELR team will run at least one validation against a lab's ELR message.
Test non-HL7 2.5.1 messages with CTDPH. Note: if your laboratory uses another message type, e.g., HL7 2.3.1, delimited, etc., you still must use standardized vocabulary as described in Step 3. Validate results with CTDPH.	☐	Instructions will be sent.
If you are unable to generate your own HL7 2.5.1 test messages or if you are using another ELR message format, you will need to send a production message to CTDPH for initial validation.	☐	If the message passes initial validation, coordinate automated daily message transmissions from your production system for the rest of the validation process. If the message does not pass initial validation, please continue message development and internal validation.

Receive confirmation from CTDPH that the production message has passed validation.	☐	
Step 7: Structure and Content Validation		
	Yes	**Comments**
CTDPH will perform structure and content validation to ensure conformance to the agreed message format. This is part of the ELR "testing" phase of on-boarding for DPH. This validation phase may take 1-2 weeks.	☐	CTDPH will notify your facility during structure and content validation to discuss and resolve any discrepancies in messaging. If your facility is non-responsive, you may not be continued in the ELR on-boarding process.
Step 8: Pre-Production Data Validation by CTDPH		
	Yes	**Comments**
CTDPH program staff will perform data validation, comparing the electronic submissions against the existing reporting structure (e.g. mail or fax). **Note: during parallel processing, more frequent reporting using existing methods may be required.**	☐	CTDPH will notify your facility during parallel data validation to discuss and resolve any discrepancies in data transmission. This step is required before approval to move to production ELR. This pre-production validation may take 4-6 weeks depending on issues found. DPH program staff must sign off that ELR messages are accurate and complete.
Step 9: Production ELR		
	Yes	**Comments**
CTDPH transitions your ELR reports to production including switching PHINMS to the production data feed.	☐	The CT ELR team will work with the lab to set a date for this transition.
Step 10: Discontinue Paper Submissions to CTDPH	**Yes**	**Comments**
After the production date, the CT ELR team will work with labs to determine when paper/fax or prior electronic reporting can be turned off. The goal is to switch to ELR for all reportables at the same time. This includes reports to CT local health departments as well. Note: rare reportables or those of immediate urgency may require paper/fax reporting.	☐	CTDPH utilizes different surveillance systems depending on disease, therefore timelines for discontinuing paper submission may vary by disease. Blood lead may require paper reporting continue to local health departments for elevated lead levels. CTDPH and your facility will perform periodic quality control checks.
CONGRATULATIONS!! You have achieved ELR Interoperability!		