TM **C A Unified Response to Training Needs** "Ready? Set? Test!" Patient Testing Is Important. Get the **Right Result.** Session 2

October 23, 2024

# Agenda

- Introduction
  - New and relevant OneLab™ Resources
  - Today's Presenters
- *"Ready? Set? Test!" Patient Testing Is Important. Get the Right Result. Session 2*
- Q&A
- Closing Remarks

### **Participant Rules of Engagement for the Webinar Chat** Please keep the following in mind when using the chat feature:

- Connect with others! React to what you're hearing, share experiences, and ask questions of your fellow participants!
- Have a question for the presenter? Use the Q&A function, not the chat.
- Show Respect and Professionalism. Inappropriate language, improper conduct, or any form of discrimination may result in removal from the webinar.
- Remain on Topic. Ensure your comments are relevant to the topic.
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OneLab TEST Job Aids



Personal Protective Equipment (PPE) Toolkit

The Laboratory Personal Protective Equipment (PPE) Toolkit is a guide to resources on using PPE.



Blood and Body Fluid Exposure

A list of standard precautions to take when cleaning up blood or body fluids.

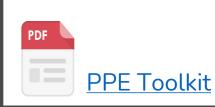




Instructions for Performing External Control Testing

Instructions for performing external control testing including quality control log for qualitative and quantitative tests.





# **Today's Presenter**



### Theresia Snelling, BS, MBA, MPM, MT(ASCP)

### Health Scientist

Quality and Safety Systems Branch (QSSB) Division of Laboratory Systems (DLS) Office of Laboratory Science and Safety (OLSS) Centers for Disease Control and Prevention (CDC)

# **Today's Presenter**



### Amanda Johnson, MHSc., MLS(ASCP)<sup>CM</sup>

Clinical Laboratory Scientist

Quality and Safety Systems Branch (QSSB) Division of Laboratory Systems (DLS) Office of Laboratory Science and Safety (OLSS) Centers for Disease Control and Prevention (CDC)



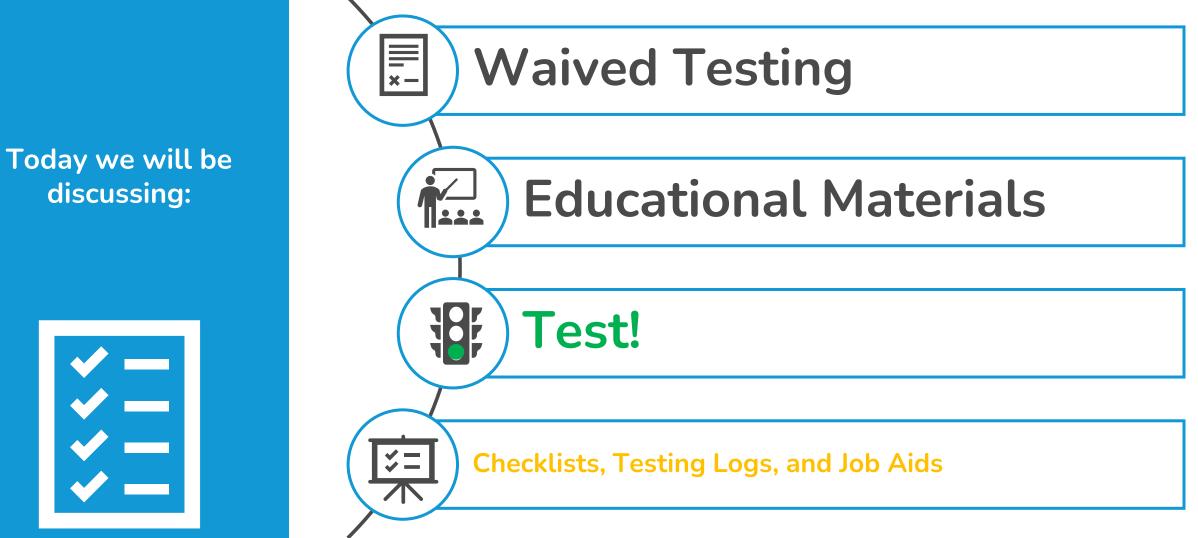
A Unified Response to Training Needs

# Ready? Set? Test! Patient Testing is Important. Get the Right Results.

Session 2

October 23, 2024

12pm – 1pm



# OneLab™

Learning Objectives

By the end of the presentation, the learner will be able to...

### Objectives

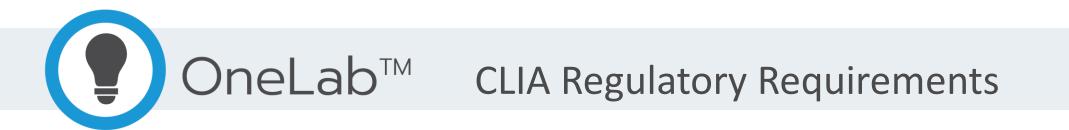
- 1. Identify the "Ready? Set? Test!" educational materials as resources for waived testing.
- 2. Describe best practices to follow when performing waived testing.
- 3. Describe how to read and record test results.
- 4. Identify actions to follow when problems (including questionable test results) occur during the testing process.
- 5. Recognize the "Ready? Set? Test!" educational material checklists, testing logs, and job aids available for use at testing sites.

# Waived Testing

# OneLab<sup>™</sup> What are Waived Tests?

- Simple tests with low risk for an incorrect result
- Often performed at the point-of-care
- Include test systems cleared by the FDA for home use and those tests approved for waiver under CLIA criteria.
- Performed without routine regulatory oversight.
- View the most current information on <u>FDA-cleared</u> <u>waived tests</u>





Type of Testing	Requirements
Waived	<ul> <li>Obtain a Certificate of Waiver</li> <li>Pay applicable certificate fees biennially</li> <li>Follow manufacturer's instructions for testing</li> </ul>

**CLIA Brochure - How to Obtain a CLIA Certificate of Waiver** 

# Ready? Set? Test! Educational Materials

**Waived Testing Resources** 

Although some of the recommendations exceed CLIA requirements for waived testing, following these good testing practices will likely lead to reliable, high-quality test results and enhance patient safety.



### **Educational Materials**



### Patient Testing is Important. Get the Right Results.

https://www.cdc.gov/labguality/waived-tests.html



Laboratory Quality: Waived Tests

### Self-Assessment Checklist for **Good Testing Practices**



The following self-assessment checklist emphasizes recommended practices for physicians, nurses, medical assistants, pharmacists, and others who perform patient testing under a Clinical Laboratory Improvement Amendments (CLIA) Certificate of Waiver. It can be used as a voluntary tool to help assure good testing practices and reliable, high quality test results.

Sites that perform testing under a CLIA Certificate of Waiver must meet the following requirements:

Enroll in the CLIA program

Disclaimet

enhance patient safety.

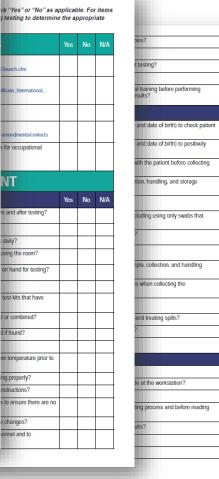
- Pay applicable certificate fees biennially
- · Follow the current manufacturer's instructions provided with the test

Additional resources that can be used to supplement this checklist can be found here: https://www.cdc.gov/labguality/waived-tests.html



Although some of the recommendations in this self-assessment checklist exceed CLIA requirements for waived testing, following these good testing practices will likely lead to reliable, high quality test results and will



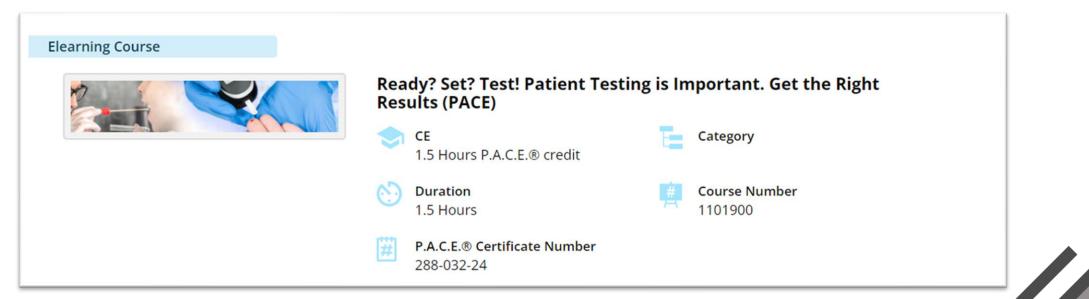


To request hard copies visit Waived Testing Booklet Request

Yes No N/A

Yes No N/A

# Ready? Set? Test! Online Course



Ready? Set? Test! Patient Testing is Important. Get the Right Results (PACE)



### Performing the Test When performing a test, be sure to:

Follow the proper testing steps according to the current manufacturer's instructions and in the exact order as they are listed.

#### Ensure QC is acceptable.

Have the manufacturer's instructions, the sitespecific procedure, or a quick-reference guide in the testing area.

Quick reference guides or color charts can be useful resources when performing a test or interpreting results.

Use timers, if indicated, and follow the required timing intervals before reading test results. Reading the Results Reading the results too soon can cause invalid or false negative results due to incomplete reaction of the sample and reagents.

### Reading a test after the time given in the manufacturer's instructions can lead to:

- False-positive results due to over-development of color
- False-negative results fading of the reaction or color
- Invalid results the reaction moves beyond a visible area



Types of Test Results

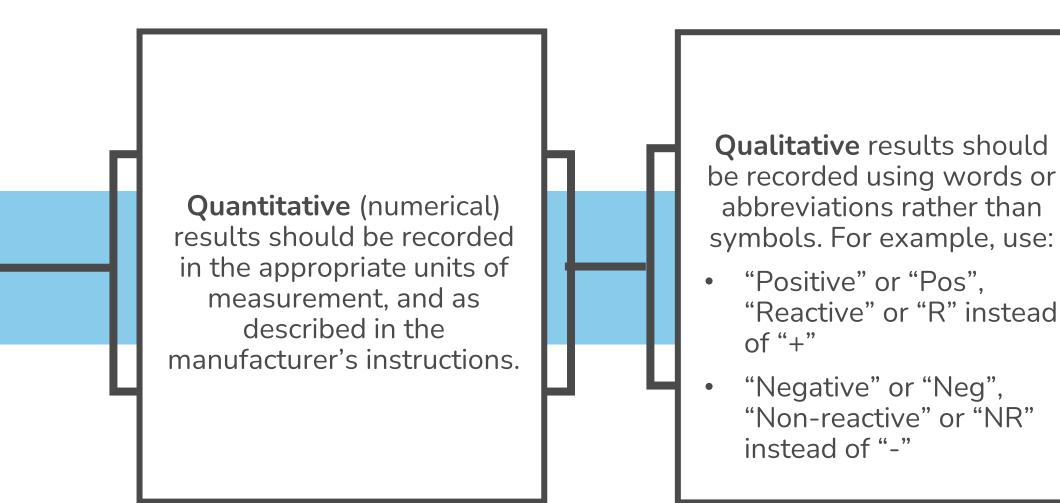
### **Quantitative results:**

- Numerical results a test produces
- Results indicate the amount of the measured substance reported in specific measurement units.

### **Qualitative results**:

- Interpreted as positive, negative, reactive, nonreactive, or invalid.
- Identify the presence or absence of a particular substance, condition, or microbial organism.

### **Recording Results**



Be sure to record any invalid or unacceptable results. If you need to repeat a test, record the first result (invalid or unacceptable), resolve the problem, retest, and then record the repeated result. Only report the final acceptable result.

### **Resolving Problems**

### Problems should be documented, reported to the person who oversees or directs testing and corrected. Some examples of possible problems include: Defective collection devices Improperly labeled samples Freezer or refrigerator failure QC failure Actions for Invalid or Questionable Test Results: Refer to the manufacturer's Repeat the test, request or Report test results after all instructions for next steps when Consult the person who collect a new sample if problems are identified and higher or lower than reportable oversees or directs testing. required corrected. range results are obtained.



## **Issuing Test Results**

### **Guidelines for Issuing Test Reports:**

- Patient test reports should be legible, standardized, and promptly issued according to site-specific procedures.
- Reports from on-site tests should be easily distinguishable from referral laboratory test reports.
- Only give patient test reports to authorized persons, in compliance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).
- Verbal communication of test results should be documented and followed by a written test report.
- Follow site-specific policies and procedures when using electronic medical record systems or laboratory information systems to issue test reports.



# **Guidelines for Critical Values**

Critical values are test results that require immediate treatment or evaluation by the physician.

Testing sites should establish a system to ensure critical values are addressed by:

- $\circ$   $\,$  Defining which tests have critical values
- Ensuring that staff are aware of the critical values and know how to alert the physician promptly
- Documenting when and to whom critical values are reported

# **Confirmatory or Supplemental Testing**

The manufacturer's instructions should explain when additional testing is required. Each testing site should have written site-specific procedures to ensure confirmatory or additional testing is performed or referred, when needed.

### Instructions should include how to:

- Order additional tests with examples of completed request forms.
- Contact the referral laboratory, if necessary.
- Collect and label the sample.
- Transport or ship samples safely.

Sites should maintain records of referred tests that:

- Link the referred sample to the original patient sample
- Document the referral laboratory, test name, and date referred
- Document when test results are received and the date of the final test report

# Record Keeping

### Good recordkeeping is necessary to:

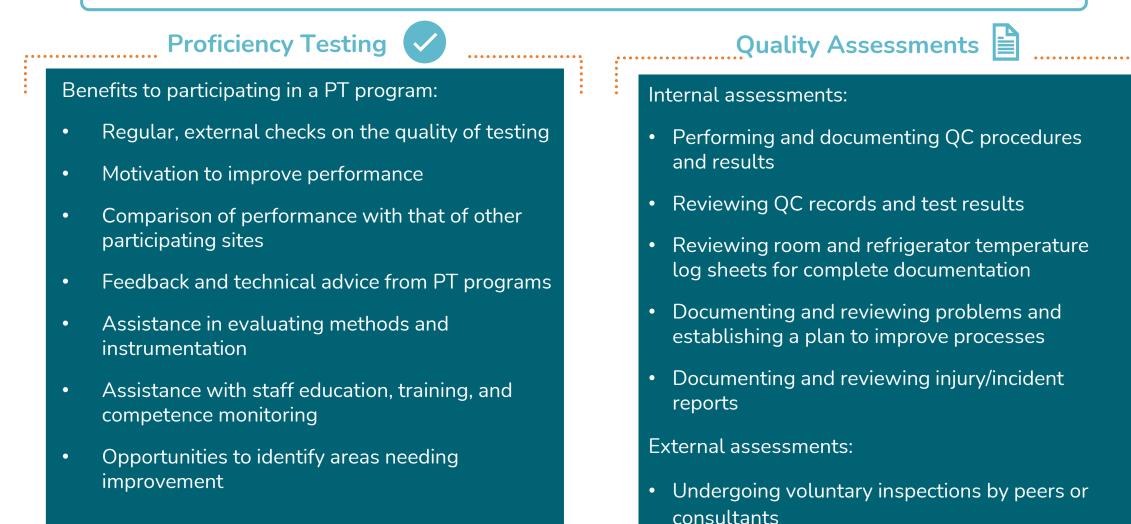
- Retrieve and verify information
- Assess test performance
- Identify and resolve problems that could affect test results
- Maintain patient and personnel information
- Check with your local/state public health department for record keeping requirements

# Examples of records to maintain for easy access and retrieval of information include:

- •Test orders, test results, confirmatory or additional testing results
- Quality control results
- •Reagents, test kits, quality control material lot numbers, dates received and used, and expiration dates
- •Daily temperature checks, test system or equipment function checks and maintenance
- •Test system failures, troubleshooting, and corrective action taken when problems have been identified
- •Test or product recall notices
- •Personnel training and competency assessments
- •Results of proficiency testing (PT) or other external quality assessment activities

### **Quality Testing**

Voluntarily options to verify and maintain testing quality:



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Subscribing voluntarily to PT programs

Checklists Testing Logs

### **Appendix A**

#### Pretesting Task Checklist

#### Prepare Work Area

- Are your work surfaces clean? Routinely clean using an EPA-registered disinfectant and dry work surfaces before and after testing.
- Is your work area well-lit? Ensure adequate lighting. Always perform testing in a well-lit area.
- Remove clutter or trash.

#### Check and Record Temperatures

Check and record temperatures of the refrigerators, freezers, and any rooms used to store testing materials daily.

Check and record temperatures of the room where testing is performed before using the room.

#### **Maintain Equipment**

- Wear gloves and thoroughly clean the surface of the testing equipment using a manufacturerrecommended or EPA-registered disinfectant before and after each use to prevent cross-contamination. Make sure that the machine is dry before using it. Be sure to wash your hands after removing gloves.
- Inspect equipment and electrical connections to be sure they are working.
- Perform calibration checks if required by the manufacturer's instructions.

\*Portable equipment, if moved, might be subject to inaccurate results.

To verify proper test system functioning, perform control testing or calibration check procedures after moving the equipment, even if not required by the current manufacturer.

#### Prepare Materials for Testing

- Regularly check inventory to ensure you have enough reagents (testing solutions) and supplies for testing.
- Check and record expiration dates of reagents and test kits.
- Discard any reagents or tests that have expired or have been opened for longer than recommended by the current manufacturer's instructions.
- Check and record lot numbers of all reagents and test kits; be sure all reagents come from the same lot. NOTE: DO NOT mix reagents from different products or lot numbers
- □ Visually inspect reagents or vials for damage, discoloration, or contamination.
- Prepare reagents according to the current manufacturer's instructions. (If opening a new reagent, write the date opened on the outside of the vial or test kit.)
- Allow refrigerated reagents and samples to reach room temperature before testing.
- Perform quality control testing, as recommended in the current manufacturer's instructions.

Appendix A - 21

# Pretesting Task Checklist

### **Appendix B**

#### **Temperature Log Instructions**

#### Purpose:

The Clinical Laboratory Improvement Amendments of 1988 (CLIA) requirements for waived testing state that a testing site must follow the current manufacturer's instructions provided with the test being performed. This includes instructions for reagents, test kits, controls, and patient sample storage.

The manufacturer's instructions will indicate the acceptable temperature range for storing reagents, test kits, controls, and patient samples. Some products have the option to be stored at multiple temperature conditions. Each testing site should consider environmental factors and equipment availability to determine the best storage condition for reagents, test kits, controls, and patient sample storage.

Refrigerators and freezers are essential for cooling or freezing the test reagents or test kits, controls, and patient samples for preservation. Typically, a refrigerator used to store patient samples is kept between 2 and 8 degrees Celsius (between 36 and 46 Fahrenheit). A freezer used for sample storage is often kept between -25 and -15 degrees Celsius (between -13 and 5 Fahrenheit). The proper temperature range for a freezer or refrigerator should be determined by considering the acceptable temperature range indicated for the reagents or test kits, controls, and patient samples that will be stored in it.

Room temperature is essential for testing conditions and storing some reagents or test kits, controls, and patient samples. Typically, rooms used for testing and storage are kept between 15 and 30 degrees Celsius (between 59 and 86 Fahrenheit). Always refer to the manufacturer's instructions before storing patient samples and products at room temperature.

To ensure that a refrigerator, freezer, or room maintains the proper temperature, it is important to check and record the temperature daily and before using the room. This applies whether the refrigerator or freezer has a temperature alarm, a chart recorder thermometer, a digital data logger thermometer, or a continuous temperature monitoring system.

#### Contents:

There are many ways to log the temperature of a refrigerator, freezer, or room. Blank logs are included for your use, along with example logs that demonstrate how to enter site-specific information correctly.

- 1. Example Refrigerator/Freezer Temperature Log Completed
- 2. Blank Refrigerator/Freezer Temperature Log
- 3. Example Room Temperature Log Completed
- 4. Blank Room Temperature Log
- 5. Example Minimum/Maximum Temperature Log Completed
- 6. Blank Minimum/Maximum Temperature Log
- 7. Example Temperature Log for Multiple Instruments Completed
- 8. Blank Temperature Log for Multiple Instruments

# Temperature Logs

### Examples and blank templates included:

- 1. Refrigerator/Freezer Temperature Log
- 2. Room Temperature Log
- 3. Minimum/Maximum Temperature Log
- 4. Temperature Log for Multiple Instruments

### Example Temperature Log

Facility: Dr. Smith's Office Location: 123 Main Street Atlanta, GA 55555

#### TEMPERATURE LOG

Refrigerator/Freezer Location Lab		Month/Year	June 2024
Acceptable Temperature Range4	-8°C		

Date	Temperature	Checked By	Date	Temperature	Checked By
1	4°C	Sara	17	#	#
2	#	#	18	4°C	Sara
3	#	#	19	4°C	Sara
4	4°C	Sara	20	4°C	со
5	4°C	Sara	21	4°C	Sara
6	8°C	со	22*	24°C	Sara
7*	15°C	Sara	23	#	#
8	4°C	Sara	24	#	#
9	#	#	25	4°C	Sara
10	#	#	26	4°C	Sara
11	4°C	Sara	27	4°C	со
12	4°C	Sara	28	4°C	Sara
13	4°C	со	29	4°C	Sara
14	4°C	Sara	30	#	#
15	4°C	Sara	31	#	#
16	#	#			

Enter # for weekends and holidays when tempe

#### Corrective Action for Out of Range Temperature

Date	Action Taken		Initials
*6/7	Refrigerator door was ajar. Closed door, check in 30 minutes. Temp at 6°C - OK		Sara
6/22	Refrigerator not staying in range. Called for service. Door seal replaced. QC'd kits stored in refrigerator. Continue to QC and monitor for problems.		

#### Facility: Dr. Smith's Office Location: 123 Main Street Atlanta, GA 55555

#### ROOM TEMPERATURE LOG

Room Location Lab		Month/Year_June 2024	
Acceptable Temperatur	e Range <u>15-30°C</u>		

Date	Temperature	Checked By	Date	Temperature	Checked By
1	20°C	Sara	17	#	#
2	#	#	18	19°C	Sara
3	#	#	19	18°C	Sara
4	20°C	Sara	20	18°C	СО
5	18°C	Sara	21	19°C	Sara
6	20°C	со	22	21°C	Sara
7*	40°C	Sara	23	#	#
8	18°C	Sara	24	#	#
9	#	#	25	18°C	Sara
10	#	#	26	19°C	Sara
11	18°C	Sara	27	20°C	со
12	19°C	Sara	28	20°C	Sara
13	18°C	СО	29	20°C	Sara
14	19°C	Sara	30	#	#
15	20°C	Sara	31	#	#
16	#	#			

#### Corrective Action for Out of Range Temperature

Date	Action Taken		Initials
*6/7	Unexpected power outage. Temp rechecked when power restored. Temp at 20°C - OK. QC'd room temp kits <sup>.</sup> Continue to QC and monitor for problems.		Sara
eview	ed By: Janice Smith, office mgr.	Date:	6/29/2024

Facility: Dr. Smith's Office Location: 123 Main Street Atlanta, GA 55555

#### MINIMUM/MAXIMUM TEMPERATURE LOG

Refrigerator/Freezer Location	Lab refrigerator	Month/Year	June 2024
Acceptable Temperature Range	4-8°C	_	

Date	Min Temperature	Max Temperature	Checked By:	Date	Min Temperature	Max Temperature	Checked By
1	2°C	6°C	Sara	17	2°C	6°C	Sara
2*	#	<u>9°C</u>	Sara	18	2°C	6°C	Sara
3	2°C	6°C	СО	19	2°C	6°C	со
4	2°C	6°C	Sara	20	2°C	6°C	Sara
5	2°C	6°C	Sara	21	2°C	6°C	Sara
6	2°C	8°C	СО	22	2°C	6°C	со
7	2°C	8°C	Sara	23	2°C	6°C	Sara
8	2°C	8°C	Sara	24	2°C	6°C	Sara
9	2°C	8°C	СО	25	2°C	6°C	со
10	2°C	8°C	Sara	26	2°C	6°C	Sara
11	2°C	8°C	Sara	27	3℃	6°C	Sara
12	2°C	8°C	Sara	28	3°C	8°C	Sara
13	2°C	8°C	Sara	29	3℃	8°C	Sara
14	2°C	8°C	СО	30	3℃	8°C	СО
15	2°C	8°C	Sara	31	3℃	8°C	Sara
16	2°C	8°C	Sara				

#### Corrective Action for Out of Range Temperature

Date	Action Taken	Initials
*6/2	Refrigerator not staying in range. Called for service. Door seal replaced. QC'd kits stored in refrigerator. Continue to QC and monitor for problems.	Sara

Reviewed By: Janice Smith, office mgr.

Date: 6/29/2024

### **Example Temperature Log**

Facility: Dr. Smith's Office Location: 123 Main Street Atlanta, GA 55555

#### Year 2024 Month July Temp/ 2 5 7 Acceptable з 4 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Range Room temp/ 25 26 24 22 27 # # 26 22 20 19 29 # # 22 23 25 26 22 # # 23 27 28 25 22 # # 24 22 26 (18 to 30°C) 25°C Incubator 25 25 25 25 25 47 47 25 26 25 25 25 47 47 25 25 26 25 25 48 25 25 24 25 25 47 26 25 25 12 12 (23 to 27°C) 37°C 37 38 37 36 37 # 37 38 38 36 37 # 38 35 30 36 35 # 36 37 38 35 36 38 37 # 48 48 48 37 Incubator # (35 to 39°C) Refrigerator 6 5 6 4 5 6 # # 6 5 4 5 # # 6 6 6 5 5 # # 6 5 4 # 5 5 6 6 # 6 (2 to 8°C) Free zer -30 -30 -30 -30 -30 # # -30 -30 -30 -30 -30 # # -30 -30 -30 -30 -30 # # -30 -30 -30 -30 -30 # # -30 -30 -30 (-25 to -35°C) Initials c0 *co* c0 *c0* c0 # # *co* c0 *co* c0 *co* # # c0 co *co co* c0 # *co* 00 *co* c0 *c0* # co *c0* c0 44 #

Temperature Log for Multiple Instruments

Temperatures should be read first thing in the morning.

Record temperature in degrees Celsius for all equipment requiring temperature monitoring. Enter # for weekends and holidays when temperature is not monitored.

Report all problems, difficulties, or abnormalities concerning equipment to the supervisor and document the appropriate corrective action. **Comments:** \*Incubator door left open. Closed door and checked temperature prior to using for testing purposes. Temp was 35°C.

Reviewed By: Joe Smith, MD

8/01/2024 Date:

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### Appendix D

# Quality Control Logs

### Examples and blank templates included:

- 1. Quality Control-Qualitative Test Log
- 2. Quality Control-Quantitative Test Log

#### **Quality Control Log Instructions**

#### Purpose:

The Clinical Laboratory Improvement Amendments of 1988 (CLIA) requirements for waived testing state that a testing site must follow the current manufacturer's instructions provided with the test including instructions for quality control (QC).

QC is designed to detect problems arising from reagent or test kit deterioration, instrument malfunction, improper environmental conditions, or operator error. Performing QC testing procedures assures that the test performs as expected and alerts the user when problems occur. QC procedures should describe the type of controls to be used, how to perform QC testing, frequency of QC testing, and actions to be taken when QC results are unacceptable.

QC material should be treated the same as patient samples by being tested in the same way that patient samples would be tested. QC is usually performed with:

- Each new operator
- · After an instrument is serviced
- · When reagent or test kit lots are changed
- . When reagent or test kit temperatures exceed the manufacturer's acceptable temperature range
- After calibration
- · When patient results seem questionable

Refer to the manufacturer's instructions for specific QC requirements for each test your testing site performs. Each testing site should determine the appropriate QC frequency for each test system. Remember that the frequency of QC testing cannot be less than what is specified in the manufacturer's instructions.

#### Contents:

There are many ways to log QC results. A blank QC log is included, along with an example log demonstrating how to enter site-specific information correctly.

- 1. Example Quality Control-Qualitative Test Log Completed
- 2. Blank Quality Control-Qualitative Test Log
- 3. Example Quality Control-Quantitative Test Log Completed
- 4. Blank Quality Control-Quantitative Test Log

Note: Qualitative tests are interpreted as positive, negative; reactive, non-reactive; or invalid. Quantitative tests give a number result that corresponds to the amount of substance being measured, are reported in specific measurement units, and have an expected range.

Example QC Log

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### Quality Control Log - Qualitative Test

]	Tech Initials	Date	Test Name	Test Lot number/ Test Exp. Date	Negative Control	Positive Control	Mid-Range Control (if applicable)	Comments	Reviewed by Initials/Date
	co	5/5/2024	Occult Blood 1-2-3	BJZ-3 /	lot #: 108-0CB	lot #: 108-0CB	lot #: N/A	*possible sample mix-	Joe Smith
1	00	5/5/2024	Occurt 61000 1-2-3	8/31/2025	result: Pos*	result: Pos	result	up, retest	5/5/2024
2	co	5/5/2024	Occult Blood 1-2-3	BJZ-3 /	lot #: 108-0CB	lot #: 108-0CB	lot #: N/A	QC passed and ready	Joe Smith
2	00	3/3/2024	Occurt 61000 1-2-3	8/31/2025	result: Neg	result: Pos	result	to use	5/5/2024
з					lot #:	lot #:	lot #:		
3					result:	result:	result		
					lot #:	lot #:	lot #:		
4					result:	result:	result		
5					lot #:	lot #:	lot #:		
3					result:	result:	result		
6					lot #:	lot #:	lot #:		
°					result:	result:	result		
7					lot #:	lot #:	lot #:		
í í					result:	result:	result		
8					lot#:	lot #:	lot #:		
°					result:	result:	result		
_					lot #:	lot #:	lot #:		
9					result:	result:	result:		
10					lot #:	lot #:	lot #:		
10					result:	result:	result:		

Example QC Log

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### Quality Control Log - Quantitative Test

I	Tech Initials	Date	Test Name	Test Lot number/ Test Exp. Date	Level 1 Control	Level 2 Control	Comments	Reviewed by Initials/Date
Ī					lot #: 91750566	lot #: 91750566	*Level 1 Control value too low, Kit was expired.	
1	co	5/5/2024	XYZ ALT	<i>C843 / 4/31/2025</i>	range: 43-78 U/L	range: 132-242 U/L		Joe Smith 5/5/2024
					result: 37 U/L*	result 203 U/L	Discard Kit	
Ī					lot #: 91750598	lot #: 91750598		
2	co	5/5/2024	XYZ ALT	C978 / 8/31/2025	range: 43-78 U/L	range: 132-242 U/L	New lot. QC passed and ready to use	Joe Smith 5/5/2024
					result: 55 U/L	result 221 U/L	ready to use	0/0/2027
Ī					lot #:	lot #:		
з					range:	range:		
					result:	result		
Ī					lot #:	lot #:		
4					range:	range:		
					result:	result		
Ī					lot #:	lot #:		
5					range:	range:		
					result:	result		
Ī					lot #:	lot #:		
6					range:	range:		
					result:	result		
I					lot #:	lot #:		
7					range:	range:		
					result:	result		
I					lot #:	lot #:		
8					range:	range:		
					result:	result	T I	
İ					lot #:	lot #:		
9					range:	range:	[	
					result:	result		

#### Instructions for Logging or Recording Results

#### Purpose:

Test results should be recorded legibly and completely. Filing all test result records in an organized, easy to find manner is a recommended practice for all testing.

#### Contents:

There are many ways to record results. A blank results log is included, along with an example log demonstrating how to enter site-specific information.

- 1. Example of Results Log Qualitative Test Completed
- 2. Blank Results Log Qualitative Test
- 3. Example of Results Log Quantitative Test Completed
- 4. Blank Results Log Quantitative Test
- 5. Example of Results Log with QC Qualitative Test Completed
- 6. Blank Results Log with QC Qualitative Test
- 7. Example of Results Log with QC Quantitative Test Completed
- 8. Blank Results Log with QC Quantitative Test
- 9. Example of Results Log for Multiple Tests Completed
- 10. Blank Results Log for Multiple Tests

#### Instructions for Logging or Recording Results

#### Results Log – Qualitative Test

- 1. Record the facility information and test name on the top of the form.
- 2. Enter the test date, sample number, patient name or identification, test results, lot number, and expiration test date.
- 3. The person who performed the test should initial the results after verifying all information has been entered correctly.

#### Results Log - Quantitative Test

- 1. Record the facility information, test name, and reportable range for the test on the top of the form.
- Enter the test date, sample number, patient name or identification, test results, lot number, and expiration test date.
- 3. The person who performed the test should initial the results after verifying all information has been entered correctly.

#### Results Log with QC - Qualitative Test

- 1. Record the facility information and test name on the top of the form.
- 2. Record the QC material lot number, expiration date, and positive and negative control results.
- 3. If the results are acceptable, QC passes, and patient results can be reported.
- If the results are not acceptable, QC fails. Troubleshoot (check expiration dates, storage condition, etc.), re-test the QC, and document the corrective action.

# Test Result Logs

### Examples and blank templates included:

- 1. Results Log Qualitative Test
- 2. Results Log Quantitative Test
- 3. Results Log with QC Qualitative Test
- 4. Results Log with QC Quantitative Test
- 5. Results Log for Multiple Tests

### Example Result Logs

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### Results Log - Qualitative Test

#### Test Name: XYZ Strep antigen

	Date	Sample ID / Patient ID	Facil Loca	Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555					
1	5/5/2024	05052018	Results Log - Quantitative Test						
2	5/6/2024	05052019		Test Name: XYZ Strep antigen Reportable Range: 5-400 U/L					
з	5/7/2024	05061930				Reportable Range: <u>5-400 WL</u>			
4				Date	Sample Number	Patient Name Steve Smith	Test Result Male: 30 U/L	Test Lot number / Test Exp. Date 8d-0679/ 11/30/2025	CO
5				5/2024	05052019	Chris White	Male: 22 U/L	Bd-0679/ 11/30/2025	60
6			3 5/7	7/2024	05061930	Sam Jones	Female: 14 U/L	Bd-0679/ 11/30/2025	со
7			4						
8			5						
9			6						
10			7						
11			- 8						
12			9						
13			10						
14			12						
15			13						
I			14						
			15						

\*Reportable Range is the mange of results for which a test system has been proven to yield accurate results. This is usually found in the manufacturer's instructions for the test.

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### Results Log With QC - Quantitative Test

#### Test Name: XYZ Strep antigen Date Sample ID / Patient ID 5/05/2018 / Steve Smith 5/5/2024 5/6/2024 5/05/2019 / 2 3 5/7/2024 5/05/1930 / 4 5 6 7 8 9 \* Reportable Range is the range of results for v

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### **Results Log With QC - Qualitative Test**

Test Name: XYZ Strep antigen

Image: Contrast White       Date       Sample ID / Patient ID       Test Result       Initials       Test Lot number / Test Exp. Date       QC Lot / Exp. Date         / Sam Jones       1       5/5/2024       5/05/20 / Tom Jones       NEG       5H       Bd-0679/ 11/30/2025       108-0CB / 9/30/20         2       5/6/2024       5/05/22 / Mattie Dunn       NEG       CO       Bd-0679/ 11/30/2025       108-0CB / 9/30/20         3       3       4       1		Negative Control Results NEG NEG
/ Sam Jones     2     5/6/2024     5/05/22 / Mattie Dunn     NEG     CO     Bd-0679/11/30/2025     108-0CB / 9/30/20       3		
2         5/6/2024         5/05/22 / Mattie Dunn         NEG         CO         Bd-0679/11/30/2025         108-0CB / 9/30/20           3	025 POS	NEG
4		
5		
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12		
13 I3		
14		
15		

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### Example Result Logs

### Example Result Log

Facility: Dr. Smith's Office Location: 123 Main Street, Atlanta, GA 55555

#### **Results Log for Multiple Tests**

	Date	Sample Number	Patient Name or ID	Test Name	*Reportable Range	Test Result	Test Lot Number / Test Exp. Date	Initials
1	5/5/2024	05052018	Donald Smith	XYZ Strep	NA	NEG	Bd-0679 / 11/30/2025	<i>co</i>
2	5/5/2024	05052019	Chris White	XYZ Strep	NA	POS	Bd-0680 / 11/30/2025	co
з	5/5/2024	05052020	Tom Jones	Occult Blood - 123	NA	NEG	Bjz-3 / 8/31/2025	SH
4	5/5/2024	05052021	Pam Roberts	Urine HCG-ABC	NA	NEG	Trp-23/11-30-2025	co
5	5/6/2024	05052022	Mattie Dunn	Occult blood - 123	NA	NEG	Bjz-3/8-31-2025	co
6	5/6/2024	05052023	Steve Smith	XYZ ALT	5-400 U/L	Male: 33 U/L	<i>C843/6-31-2025</i>	co
7								
8								
9								
10								
11								
12								
13								
14								
15								

\* Reportable Range is the range of results for which a test system has been proven to yield accurate results. This is usually found in the manufacturer's instructions for the test.

Job Aids & Other Waived Testing Resources

### Appendix E

#### Safety: Blood and Body Fluid Exposure

It is important to use standard precautions when cleaning up blood or body fluids. Always assume they are infectious and act accordingly.

#### If a hand washing sink is available:

- 1. Wet hands with warm running water.
- Apply soap and vigorously scrub all surfaces of hands and fingers, using large amounts of soap and water for at least 15 seconds.
- 3. Rinse hands and dry with disposable towels.
- 4. Use a disposable towel to turn off the faucet.

Before leaving the area, decontaminate the sink and faucet handles using 10% bleach, or an Environmental Protection Agency (EPA) registered disinfectant effective against HBV, HIV, and other bloodborne pathogens. See Appendix F: for Common Disinfectants and Antiseptics.

If mucous membranes or eyes have been exposed to blood or body fluids, follow the steps below.

- 1. Rinse mucous membranes (i.e., eyes, nostrils, and mouth) with large amounts of water or saline solution.
- 2. If running water is not readily available, use another water source, such as bottled water, to rinse.

#### If there is a puncture of skin from a sharp instrument or needle, follow the steps below.

- 1. Wash the puncture with soap and water while encouraging the puncture to bleed by gently squeezing it, if necessary.
- 2. Bandage the puncture when finished.

#### Report exposure

- Report any exposures to those responsible for managing exposures. Prompt reporting is essential, as post-exposure treatment that might be recommended, in some cases, should be started as soon as possible.
- Discuss the possible risks of acquiring hepatitis B, hepatitis C, and HIV and the need for post-exposure treatment with the provider managing your exposure.

### Blood and Body Fluid Exposure Job Aid

## Safety: Gloves Job Aid

#### Safety: Gloves

#### Disposable Gloves (latex, vinyl, nitrile)

Disposable gloves reduce hand contamination, prevent cross-contamination, and protect from infection. Gloves should fit properly, not restrict hand coordination, accommodate individual requirements such as allergy to latex, and meet the task's requirements. Rings, long fingernails, and fingernail jewelry can make it more challenging to put the gloves on properly and cause gloves to tear more easily.

To help prevent allergic reactions to latex gloves, use appropriate work practices.

- Do not use latex gloves. If you choose latex gloves, it is recommended to opt for powder-free gloves that have a lower protein content.
- Do not use oil-based hand creams or lotions when wearing latex gloves.
- After removing gloves, wash hands with a mild soap for at least 15 seconds, and then rinse and dry them thoroughly.
- Familiarize yourself with the signs of latex allergy, which may include symptoms such as a skin rash, hives, flushing, itching, nasal congestion, eye irritation, sinus problems, asthma, and in rare cases, even shock.

For more information on how to protect yourself from latex exposure and allergy in the workplace, visit: https://www.cdc.gov/niosh/docs/98-113/.

#### All employees using disposable gloves must observe the following precautions.

- Cover open sores, dermatitis, cuts, etc., with a dressing or bandage.
- Wash hands before putting on gloves.
- Never wash or reuse disposable gloves.
- Remove gloves after they become contaminated and before leaving the work area.
- Remove contaminated gloves using a procedure that avoids contact with the glove's outer surface.
- Dispose of contaminated gloves in infectious waste containers in the work area.
- Wash hands immediately or as soon as possible after removal of gloves.

#### Instructions on how to safely remove gloves:

https://www.cdc.gov/vhf/ebola/resources/pdfs/poster-how-to-remove-gloves-p.pdf

### Appendix F

#### **Common Disinfectants and Antiseptics**

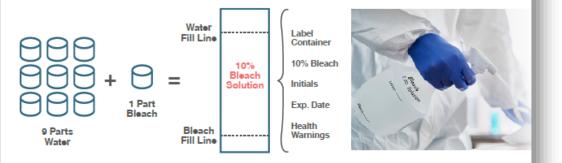
Note: Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services. Proprietary disinfectant products should be used in accordance with the manufacturer's instructions for concentration, contact time, or other conditions of use.

#### Disinfectants

Selected EPA-registered disinfectants: A list of EPA's registered sterilizers, tuberculocides, and antimicrobial products against certain bacteria and viruses can be found at: https://www.epa.gov/pesticide-registration/ selected-epa-registered-disinfectants.

Chlorine compounds are powerful disinfectants that are inexpensive and easy to obtain. Sodium hypochlorite or household chlorine bleach solutions possess intermediate-level disinfectant properties and are commonly used to disinfect lab surfaces. For maximum potency, the working solution should be prepared fresh at the time of use or daily as needed, but studies show that weekly preparations work, too. A 10% bleach solution is also called 1/10, 1:10, or 5,000 ppm bleach solution.

#### The directions for preparation are:



Note: Bleach will corrode some equipment. Refer to the manufacturer's instructions for alternatives and recommendations for cleaning and disinfecting procedures.

**Commercial Products.** The EPA lists registered commercial products that are effective against certain bacteria and viruses. Examples are 'Lysol' (cresol and soap solution) and 'Stericol' (xylenol-rich cresylic acid and soap solution).

#### Antiseptics

Alcohols are considered intermediate-level disinfectants. Alcohol solutions are often used as a skin antiseptic. Alcohols, such as isopropyl (rubbing) alcohol, are well suited to rapidly kill bacteria on the skin surface in preparation for fingerstick or venipuncture.

### Common Disinfectants and Antiseptics Job Aid

# To Test or **Not to Test?**

#### Considerations for Waived Testing

https://www.cdc.gov/labquality/waived-tests.html



Lab Quality: Waived Tests

To Test or Not to Test booklet describes considerations and preparations needed prior to performing waived testing. This resource is intended to assist those who want to implement and oversee waived testing or offer a new test under a CLIA Certificate of Waiver.

To request hard copies visit Waived Testing Booklet Request



### Summary

- Ready? Set? Test! educational materials free resources equip testers with good testing practices that help improve the quality of test results and enhance patient safety.
- Follow best practices when performing waived testing.
- Always follow the manufacturer's instructions.
- Record test results accurately and according to the testing site's policy for reporting results.
- When problems occur during the testing process, document and report to the person who oversees or directs testing.
- In the event of questionable test results, repeat the test with a new sample if required.
- Ready? Set? Test! checklists, testing logs, and job aids are available for use at testing sites.



# OneLab **TEST**

### Share your feedback and training needs with us!

- 1. Log into your <u>OneLab REACH account</u>. You must be logged into your REACH account to access the evaluation.
- 2. Click on <u>"Ready? Set? Test!" Patient Testing is Important.</u> <u>Get the Right Result. Session 1</u> to take you to the survey.
- 3. Click "Enroll"

#### Live Event Course



#### Ready? Set? Test! Patient Testing is Important. Get the Right Result. Session 2

Each year 14 billion laboratory tests drive the majority of medical decisions. Many of these tests do not require routine regulatory oversight under a Clinical Laboratory Improvement Amendments (CLIA) Certificate of Waiver from the Centers for Medicare & Medicaid Services (CMS). The "Ready? Set? Test!" free resources equip testing personnel with the basic training they need to perform waived patient testing safely and accurately and ensure reliable, high-quality test results. This event will highlight the "Ready? Set? Test!" resources and waived testing best practices for professionals and volunteers who perform or coordinate waived testing at non-traditional sites or settings (e.g., nursing homes, clinics, and jails).







5. Select "Start".





#### Ready? Set? Test! Patient Testing is Important. Get the Right Result. Session 2

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Category Diagnostic Testing



#### 6. Select "Next step" and "Next".

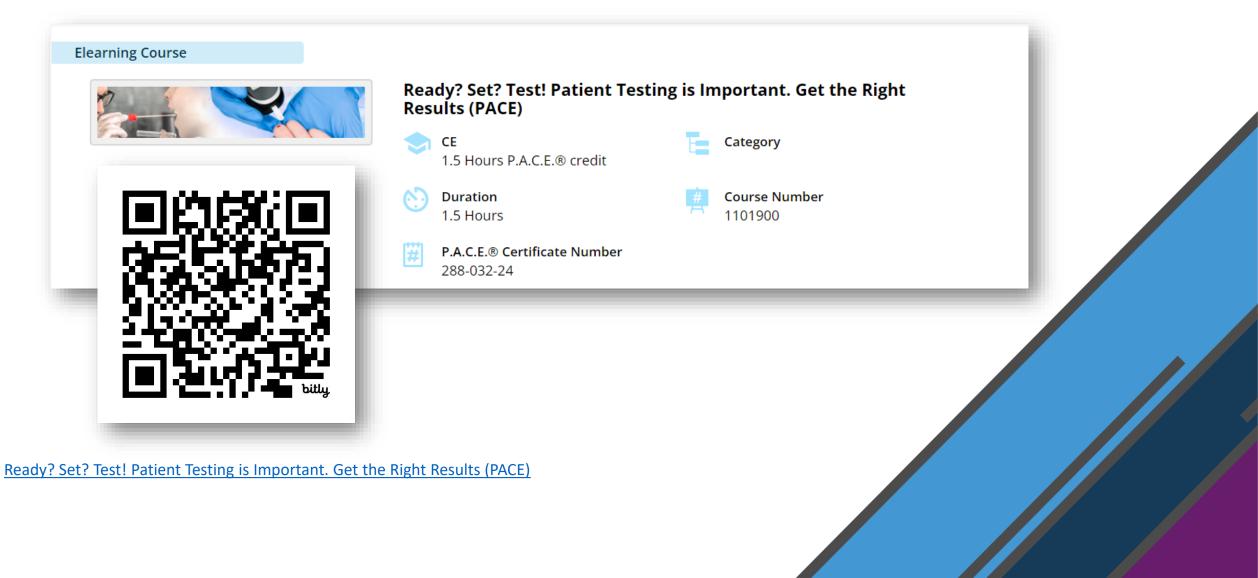
O Next step.			

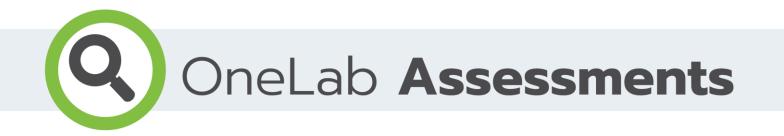
7. Complete the evaluation and click "Submit".

Thank you for completing this OneLab event survey. If you have any questions, please contact onelab@cdc.gov.



### Ready? Set? Test! Online Course





# Share your feedback and testing training needs with us! Email <u>OneLab@CDC.gov</u>