Center for Surveillance, Epidemiology, and Laboratory Services



Training Needs Assessment and Response
April 23, 2021



Training Needs Assessment

Goal: To support the development and dissemination of relevant and timely education and training resources for OneLab

Requested participation from **1,141** OneLab members

28 members participated in 6 focus groups which produced 144 excerpts

3 education/training themes and **4 cross-cutting** needs identified

20+ unique existing resources

15+ resources coming soon, including OneLab REACH

Collect Data

(February 2021)

Analyze Data

(March 2021)

Respond to Needs

(April 2021 and beyond)

372 survey responses

897 open survey responses coded based on theme

8 existing eLearnings



Themes from Training Needs Assessment



Education and Training Themes



Technical Topics

Clinical laboratory professionals need additional scientific, technical, and regulation trainings related to completing their daily COVID-19 work



Testing and Laboratory Quality



Regulations, Guidelines, and Reporting



Laboratory Safety



Managers need training in laboratory operations and supply chain management



Clinical laboratory senior leaders need training in crisis leadership and communication

Cross-cutting Needs



Collaborative Environment

Clinical laboratory professionals sometimes face challenges in connecting with peers beyond their own team



Centralized Resources

Existing resources are disseminated via various channels (websites, listservs, etc.) – making them challenging to locate and access



Flexible Learning Modules

Trainings may require substantial time spent away from the bench



Cohesive Messaging for the Public

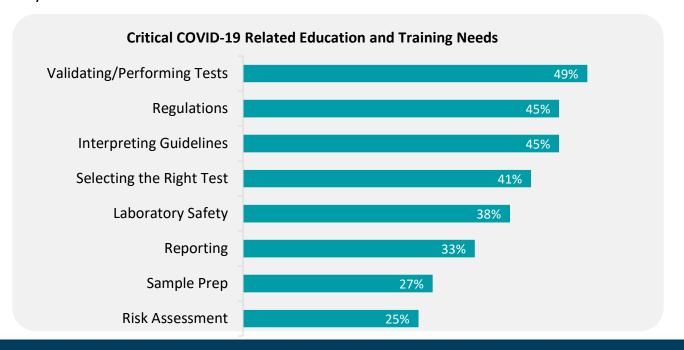
A lack of consistent, cohesive public-facing messaging tools creates challenges in responding to the high volume of requests for information

EDUCATION AND TRAINING NEEDS Center for Surveillance, Epidemiology, and Laboratory Services

Technical Topics



Clinical laboratory professionals need additional scientific, technical, and regulation trainings related to their daily COVID-19 work



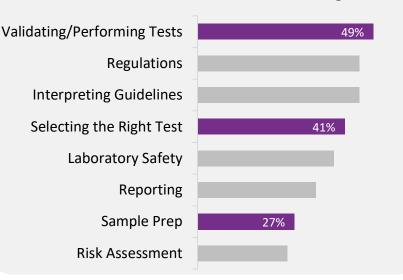
Testing and Laboratory Quality

Technical Topics



Clinical laboratory professionals are finding existing scientific and technical trainings regarding COVID-19 testing and laboratory quality to be insufficient and challenging to locate and access

Critical COVID-19 Related Education and Training Needs



"If we switch specimens or swabs that came with a kit, does it take us back to step one of the **validation process**?"

"We are **relying too heavily on manufacturer websites** and do not have the time or capacity to validate their instructions."

"[Our primary] challenges are understanding antibody and antigen testing. We don't have clarity – what is an **acceptable sensitivity** of these tests?"

"It would be great to have a virtual training for sample collection, which has a great influence on SARS-CoV-2 test results."

Testing and Laboratory Quality

Technical Topics



Identified Topics

- Independent verification of manufacturer SOPs
- Test validation, e.g., impact of COVID-19 variants and substitution of reagents on test validity
- Sample validation/suitability
- Acceptable sensitivity and specificity
- Gene sequencing
- New hire resources (quick ramp-up to become laboratory ready)

Available Now				
CDC Laboratory Training	eLearning Courses			
Ready? Set? Test! Patient Testing is Important. Get the Right Results	eLearning			
Waived Tests	Educational resources			
<u>Diagnostic Testing Job Aids</u>	Job Aid			
Emergence of SARS-CoV-2 Variants and Impact on IVD Testing (CLCR Call - April 5, 2021)	Webinar Recording			
Coming Soon!				
COVID-19 Variants: Testing and Validation	OneLab Network Summer 2021 Meeting & Job Aids			

Job Aid

Toolkit

FAQs on Quality

New Hire Toolkit

Fall 2021

Fall 2021

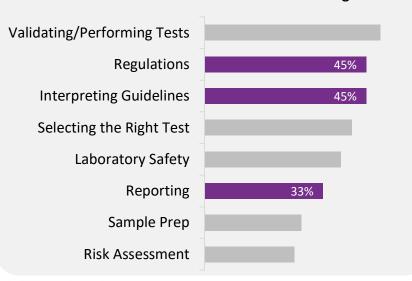
Regulations, Guidelines, and Reporting

Technical Topics



Clinical laboratory professionals need a consolidated source of accurate updates and training resources for COVID-19 related regulations, guidelines, and reporting

Critical COVID-19 Related Education and Training Needs



"I'm worried about **regulations and compliance** around proper specimen storage, swab testing, and identifying new assays as they reach the market."

"I'm not clear on the **appropriate intended uses** of some tests that are on the market due to **EUAs**."

"I'm still unsure of how to report correctly across multiple states!"

Regulations, Guidelines, and Reporting

Technical Topics



Identified Topics

- Emergency Use Authorizations
- Reporting to public health officials (including across state lines)
- Reporting results to health care providers

Available Now	
Preparing and Supporting Laboratories Responding to COVID-19	Website & Resources
How To Report COVID-19 Data	Website
COVID-19 Guidance and Regulation FAQs	FAQs

	Coming Soon!		
CLIA 101	Cu	ırriculum	Fall 2021

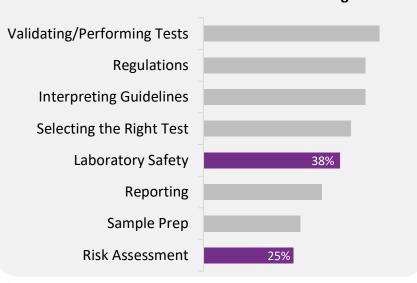
Laboratory Safety

Technical Topics



Clinical laboratory professionals need standardized safety and risk assessment trainings to mitigate workplace changes brought on by the pandemic

Critical COVID-19 Related Education and Training Needs



"[We] need to double down on efforts for biosafety training."

"Biosafety training [is a high priority need] for me. I hired a lot of people that don't have a background in this, and don't know [how to properly use] gloves and PPE."

"We are in need of one-pagers summarizing **lab safety topics**, specifically **risk assessments** that can easily be distributed to testing sites."

Laboratory Safety

Technical Topics



Identified Topics

- PPE use (emergencies, supply chain disruptions)
- Safe storage, sample transport
- Biosafety with reagents (e.g., fume hood usage)
- Risk assessment

Available Now	
LabVR: Biological Safety Cabinet (BSC)	VR Course
Fundamentals of PPE in Clinical Laboratories	eLearning
Packing and Shipping Dangerous Goods	eLearning
Fundamentals: BSC, Centrifuge, Chemical Fume Hood	eLearning
PPE Videos and Other Safety Job Aids	Job Aids
Risk Assessment Process (printable version coming soon)	Website

Coming Soon!		
LabVR: PPE Edition	VR Course	Summer 2021
Intro to Laboratory Risk Management	eLearning	Fall 2021
Laboratory Risk Management	Curriculum	Rolling basis

Preparedness and Emergency Operations



Managers need training in laboratory operations and supply chain management

Some managers feel confused and **overwhelmed with upkeep of equipment and management of materials such as reagents**

"I think that most laboratories in the United States lack an [understanding] of revenue cycle, cost accounting and management, budgets, and how to successfully manage the supply chain. We are very good at managing quality, but the greatest risk is with operations, budgets, and financial planning and the impact that these things have on business continuity."

"I think a **flow sheet** would be very helpful for the **emergency preparedness** and response topic."

"We need training on **funding and supply chain management** within our labs."

"We need ... change management training, or at the very least we need to know what other labs are doing."

Preparedness and Emergency Operations



- Supply chain management
- Inventory management
- Supply chain analytics
- Procurement
- Cost accounting, revenue cycle management, financial planning and funding
- Equipment upkeep
- Materials management

Available Now

Continuity of Operations Planning (COOP)

eLearning

Coming Soon!

Emergency Laboratory Operations Toolkit

Toolkit

Summer 2021

Supply Chain Lessons Learned and Q&A

OneLab Network Event

Fall 2021

Crisis Leadership



Clinical laboratory senior leaders need training in crisis leadership and communication

"Small lab leadership needs help thinking [about emergency preparedness] on this scale." [The CL community needs] a toolkit or a playbook to guide us through the current and future pandemics."

"My staff do not feel that they are identified and appreciated as front-line healthcare workers, and it is affecting their morale."

"My staff are feeling overwhelmed and are burning out."

"I'm concerned about [tracking and maintaining] my CLIA certifications."

Crisis Leadership



- Crisis leadership
- Crisis communication

		Avai	labl	le N	Vow

Crisis and Emergency Risk Communication (CERC) Online training and resources

OSHA Guide to Managing Stress in a Crisis Pamphlet

Coming Soon!				
Crisis Leadership	Webinar	Summer 2021		
Leadership Toolkit	Toolkit	Fall 2021		



Cross-cutting Needs



Collaborative Environment

Clinical laboratory professionals sometimes face challenges in connecting with peers beyond their own team



Centralized Resources

Existing resources are disseminated via various channels (websites, listservs, etc.) – making them challenging to locate and access



Flexible Learning Modules

Trainings may require substantial time spent away from the bench



Cohesive Messaging for the Public

A lack of consistent, cohesive public-facing messaging tools creates challenges in responding to the high volume of requests for information

Collaborative Environment



Clinical laboratory professionals sometimes face challenges in connecting with peers beyond their own team

"I really hope OneLab becomes a place where we can all talk to each other because we desperately need that right now."

"[COVID-19 has] brought all these silos of labs together for one common good — and I want us to [take advantage] of that as we move forward. That's why I'm excited about OneLab."

"In the future, [we'd like to see] some sort of **round table forum** for validating procedures and making sure we have appropriate validity for testing."

"COVID-19 caused the **cancellation of conferences**, which usually serve as an opportunities for laboratory management to collaborate"

Collaborative Environment



- Collaboration across public health laboratories and clinical laboratories
- Environment to share best practices and lessons learned
- Conferences

Available Now			
OneLab Network	Meetings & Resources		
COVID-19 Laboratory (CLCR) Calls	Live Discussion and Q&A	Ongoing, bi-weekly	

	Coming Soon!		
LabVR: OneLab Edition	Virtual Lab	TBD	
OneLab Summit	Virtual Conference	TBD	

Centralized Resources



Existing resources are disseminated via various channels – making them challenging to locate and access

"I am scrambling to keep up-to-date with COVID-19 trainings and need a centralized source of resources."

"[We need] a **centralized place to communicate**. I really hope OneLab becomes a place where **we can all talk to each other** because we desperately need that right now."

"I get regulatory information from the FDA, CMS, CDC, CLIA, and CAP... but there is no centralized reporting [on regulatory updates], which creates confusion."

"There needs to be a centralized location of regulations for public health laboratories for individuals that don't have experience and need questions answered."

Centralized Resources



- Central hub for crucial COVID-19 related resources and trainings
- Easily accessible location to receive COVID-19 testing updates and reference material
- Centralized location for guidance and regulations from federal agencies

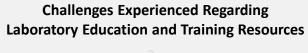
Available Now		
CDC Laboratory Training	eLearning Courses	
<u>Preparing and Supporting Laboratories</u> Responding to COVID-19	Website & Resources	

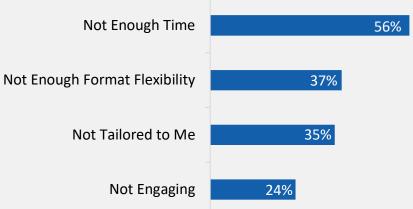
Coming Soon!			
OneLab Initiative Website	Website & Resources	Summer 2021	
OneLab REACH	Learning Management System	Fall 2021	
Regulation Tracker	Online	TBD	

Flexible Learning Modules



Trainings may require substantial time spent away from the bench





"[We prefer] trainings in **shorter segments**; especially with **pause feature** since sometimes we are busy and can get distracted."

"I like **short trainings** that incorporate **audio and video** and lots of different training styles. I prefer short videos with **immediate feedback** via quizzes."

"Webinars are helpful – webinars that occur on a regular schedule would be incredibly helpful."

"[I prefer] trainings that **are hands-on**, or if they're virtual, I prefer them to be **visual and interactive**."

Flexible Learning Modules



Identified Topics

- Short, self-paced trainings with CEUs
- Webinars
- Visual-heavy one-pagers, infographics, or fact sheets
- Printed materials, in addition to digital
- Structure learning around case studies or real-life scenarios
- Interactive and engaging

Available Now			
CDC Laboratory Training	eLearning Courses		
CDC Laboratory Videos and Job Aids	Videos and Other Job Aids		
Packing and Shipping	Training of Trainers (by request)		
LabVR: Biological Safety Cabinet (BSC)	VR Course		

Coming Soon!			
Effectively Training Adult Learners	Training of Trainers	Fall 2021	
Point of Care Testing	Training of Trainers	Fall 2021	
LabVR: PPE Edition	VR Course	TBD	
LabVR: OneLab Edition	Virtual Lab	TBD	
Highlighted Trainings Needs from OneLab Network Meetings	Case Studies	Winter 2021	

Cohesive Messaging for the Public



A lack of consistent, cohesive public-facing messaging tools creates challenges in responding to the high volume of requests for information

"The general public does not understand who we are or what we do, even at a high level."

"We need easy-to-read and understand one-pagers to share with health care providers (HCPs) who do not understand our workflows."

"Having material that we can easily put on our website or give out would be helpful. We get lots of **inquiries from non-medical sites**."

"We are getting an **abnormally large number of calls for information requests** from people who we are not used to responding to.... such as party planners, patients, sporting events, etc."

Cohesive Messaging for the Public



Identified Topics

- Address public's FAQs on testing (types, interpreting results, sensitivity and specificity)
- Address HCPs' FAQs on test sensitivity/specificity and clinical laboratory workflow (e.g., processing time)
- Communicate role and responsibilities of clinical laboratories
- Provide tools to respond to the unprecedented influx of information requests

Available Now			
CDC COVID-19 FAQs	FAQs		
CDC COVID-19 Testing Overview	Guideline	S	
Coming Soon!			
There's a Test for That! (COVID testing overview)	Video	Summer 2021	
Prepared Responses for General Public (FAQs)	FAQs	Summer 2021	

CDC just made it easier to find the right lab training course for you!



New search tool, active filters, and improved course page layouts



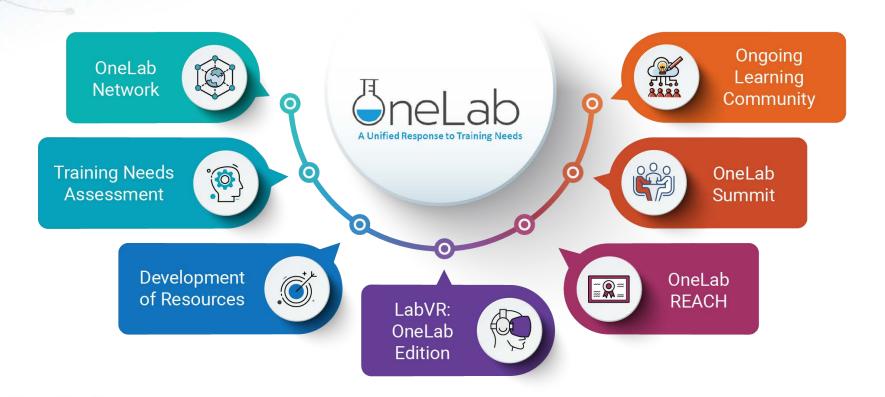
www.cdc\gov/labtraining

Existing Resources



(click to open)

OneLab Initiative



Upcoming



OneLab Network Meeting – June 2021

*Zoom Link / Registration Coming Soon

For more information, contact CDC 1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Images used in accordance with fair use terms under the federal copyright law, not for distribution.

Use of trade names is for identification only and does not imply endorsement by U.S. Centers for Disease Control and Prevention.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of Centers for Disease Control and Prevention.