Form Approved
OMB No. 0920-1050
Exp. Date: 5/31/2022

CDC Microbiology-Oriented eLearning Courses Learner Feedback Survey

Thank you for taking this voluntary survey to help us understand how well the microbiology-oriented eLearning courses produced by the Division of Laboratory Systems, Centers for Disease Control and Prevention have been serving the needs of our learners. The feedback you provide will also inform updates to these courses and future course development.

The survey questions will take approximately 10 minutes to complete. Your responses will be anonymous and no unique identifying information will be sought or kept. The feedback we receive will be used by our programs in aggregate only.

INSTRUCTIONS

The courses are grouped into three sections for this survey:

- **Biothreat Preparedness for Sentinel Laboratories courses**
- **Basic Microbiology courses**
- **Methods of Antimrobial Susceptibility Testing Educational Resource (M.A.S.T.E.R.) courses**

Survey formatting will direct you to the appropriate section(s). For example, if you indicate you did not complete any of the Biothreat Preparedness courses, you will skip directly to Basic Microbiology courses section.

The survey contains the following two questions for each course.

1. **To what extent did you apply the course knowledge and/or skills to your personal or facility's work practices?** ***Please respond by clicking on the button beside the option that best reflects your opinion. If you did not take the course, select "I did not complete this course."***
2. **Please share examples, challenges or comments related to how you may have applied the course information to your personal or facility's work practices.**

Please select "next" to begin the survey.

Learning Objectives

Learning objectives are provided for your reference.
Please click "Next" to proceed to the survey questions.

Biothreat Preparedness for Sentinel Laboratories
Bacillus anthracis, Brucella* spp., *Burkholderia* spp., *Francisella tularensis*, *Yersinia pestis
Summarize the basic epidemiology and ecology of the organism
Discuss the role of the LRN sentinel laboratory
Describe how to use sentinel laboratory protocols to rule out or refer potential biothreat agents from isolates
Review media and laboratory tests used in the sentinel laboratory protocols

Basic Microscopy
Identify the major components of the microscope and their function.
Identify how to maintain a microscope.
Discuss the role of Kohler illumination in microscopy.
Describe the process to correctly focus on the appropriate field of view.
Use the ocular micrometer to measure an object under the microscope.
Demonstrate the ability to troubleshoot encountered problems with the microscope.

Routine Microscopy Procedures
Outline the steps of preparing a smear.
Express the purpose, reagents and steps of the Gram stain procedure.
Interpret the results seen in the bacterial cells, with the effects of the various reagents during the Gram stain procedure.
Outline the potassium hydroxide (KOH) procedure and its uses.
Identify how to prepare and interpret a wet mount.
Identify the steps and results obtained in the India ink procedure.
Identify and resolve commonly encountered problems

Basic Culture Media
Distinguish enrichment, differential, and selective media.
Review the principles of the most commonly used media.
Contrast various culture media.
Describe the steps of streaking a plate.
Interpret results on various culture media.
Recognize the different types of colonial morphology.
Identify commonly encountered problems

Biochemicals and Gram Positive Organisms and
Biochemicals and Gram Negative Organisms
Identify different types of bacterial morphology seen on a Gram stain
Identify different types of colonial characteristics
Use flowcharts and identification charts to identify some common aerobic (Gram positive or Gram Negative) microorganisms
Associate various biochemical tests with their correct applications
Interpret the results of biochemical methods

M.A.S.T.E.R. Antimicrobial Susceptibility Testing Methods
Identify the steps required to perform the clinical and Laboratory Standard Institute (CLSI) disk diffusion and Minimal Inhibitory Concentration (MIC) reference procedures.
Identify the key steps that must be modified when performing disk diffusion or MIC procedures for fastidious organisms.
Recognize CLSI's standards on commercial antimicrobial susceptibility test systems.

Review the importance and limitations of commercial antimicrobial susceptibility test systems.

M.A.S.T.E.R. Antimicrobial Susceptibility and CLSI Standards

Recognize the role of CLSI in developing standards for antimicrobial susceptibility testing of bacteria isolated from clinical specimens.
Identify CLSI standards for antimicrobial susceptibility testing of bacteria isolated from clinical specimens.
Given a particular organism, select antimicrobial agents appropriate for testing and reporting from the correct CLSI table.
Outline a strategy for selective reporting of antimicrobial agents using CLSI tables

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Biothreat Preparedness for Sentinel Laboratories eLearning Courses

* 1. Did you complete one or more of the following Biothreat Preparedness Training for Sentinel Laboratories eLearning Courses?

Bacillus anthracis (Anthrax)
Brucella spp.
Burkholderia spp.
Francisella tularensis (Tularemia)
Yersinia pestis (Plague)

- ◯ Yes
- ◯ No - you will skip to the next section

* 2. To what extent have you applied the information and/or skills presented in the course to your personal or facility's work practices?

Please select the option that best describes how you used the course information.
If you did not complete the course, select "I did not complete this course."

	I recommended or initiated changes to my personal or my facility's work practices	I reviewed my personal or my facility's work practices to determine if they are up to date	I improved my awareness or understanding of this topic	This course did not improve my understanding or provide information relevant to my work	I did not complete this course
Bacillus anthracis (Anthrax)	○	○	○	○	○
Brucella spp.	○	○	○	○	○
Burkholderia spp.	○	○	○	○	○
Francisella tularensis (Tularemia)	○	○	○	○	○
Yersinia pestis (Plague)	○	○	○	○	○

3. Please share examples, challenges or comments related to how you may have applied the course information to your personal or facility's work practices:

Bacillus anthracis	
Brucella spp.	
Burkholderia spp.	
Francisella tularensis	
Yersinia pestis	

Basic Microbiology eLearning Courses

* 4. Did you complete any of the following Basic Microbiology eLearning courses?

Basic Microscopy
Routine Microscopy Procedures
Basic Culture Media
Biochemicals and Gram Positive Organisms
Biochemicals and Gram Negative Organisms

- ◯ Yes
- ◯ No - you will skip to the next section

Basic Microbiology eLearning Courses

* 5. To what extent have you applied the information and/or skills presented in the course to your personal or facility's work practices?

Please select the option that best describes how you used the course information.
If you did not complete the course, select "I did not complete this course."

	I recommended or initiated changes to my personal or my facility's work practices	I reviewed my personal or my facility's work practices to determine if they are up to date	I improved my awareness or understanding of this topic	This course did not improve my understanding or provide information relevant to my work	I did not complete this course
Basic Microscopy	○	○	○	○	○
Routine Microscopy Procedures	○	○	○	○	○
Basic Culture Media	○	○	○	○	○
Biochemicals and Gram Positive Organisms	○	○	○	○	○
Biochemicals and Gram Negative Organisms	○	○	○	○	○

6. Please share examples, challenges or comments related to how you may have applied the course information to your personal or facility's work practices:

Basic Microscopy	
Routine Microscopy Procedures	
Basic Culture Media	
Biochemicals and Gram Positive Organisms	
Biochemicals and Gram Negative Organisms	

M.A.S.T.E.R. Antimicrobial Susceptibility Testing eLearning Courses

* 7. Did you complete any of the following Methods in Antimicrobial Susceptibility Testing Education Resource (M.A.S.T.E.R.) Courses?

Antimicrobial Susceptibility Testing Methods
Antimicrobial Susceptibility Testing and CLSI Standards

- ◯ Yes
- ◯ No - you will skip to the end of the questionnaire.

* 8. To what extent have you applied the information and/or skills presented in the course to your personal or facility's work practices?

Please select the answer that best describes how you used the information for each course.
If you did not complete the course, select "I did not complete this course ."

	I recommended or initiated changes to my personal or facility's work practices	I reviewed my personal or my facility's work practices to determine if they are up to date	I became more aware or improved understanding of this topic	This course did not improve my understanding or provide information relevant to my work	I did not complete this course
Antimicrobial Susceptibility Testing Methods	○	○	○	○	○
Antimicrobial Susceptibility Testing and CLSI Standards	○	○	○	○	○

9. Please share examples, challenges or comments related to how you may have applied the course information to your personal or facility's work practices:

Antimicrobial Susceptibility Testing Methods

Antimicrobial Susceptibility Testing and CLSI

Thank You

We appreciate your feedback - thank you for your time.

When you click "done" you will exit the survey.