# INTRODUCTION TO LABORATORY INFORMATICS: LIFE OF A SPECIMEN

AN ONLINE LEARNING COURSE AVAILABLE ON <u>WWW.CDC.TRAIN.ORG</u>

> Sponsored by the Division of Laboratory Systems, Center for Surveillance, Epidemiology and Laboratory Services, Centers for Disease Control and Prevention

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## DESCRIPTION

Laboratory informatics is the specialized application of information technology to enable and enhance scientific processes and the delivery of laboratory information. It is a critical part of today's laboratory operations, helping to ensure high quality and reliable data and results.

This basic-level eLearning course is the first of a two-part introductory module on laboratory informatics. The course provides information on the role and processes of laboratory informatics through exploration of the "life of a specimen" as a specimen moves through the laboratory. Topics covered include the roles of various personnel in the laboratory informatics enterprise, data relationships, data quality and standards, and the generation and flow of information as a specimen progresses through the preanalytic, analytic, and post-analytic phases.

## **AUDIENCE**

This online course is designed for public health and clinical laboratory staff (including managers and leaders) and persons interested in the role and importance of informatics to the operation and mission of the laboratory.

Learners who complete this course can then take the second course in the two-part module– *Introduction to Laboratory Informatics: Life of a Result.* 

### **SPECIAL NEEDS**

Course content is closed captioned, where applicable, and optimized for a screen reader.

### **FREE REGISTRATION**

- Locate the course online at <u>www.cdc.gov/labtraining</u>
- Follow the link to register for the course in TRAIN
- If you have difficulty with the online registration process, please email <u>labtraining@cdc.gov</u>



## **OBJECTIVES**

At the conclusion of this course, the participant will be able to:

- Recognize what laboratory informatics is and how it directly supports patient care and public health goals
- Identify who plays a role in laboratory informatics and explain the purpose of each role
- Identify the sequence of data and information flow within the laboratory from specimen collection/receipt to specimen storage/disposal
- Recognize the importance of data quality and the factors that impact data quality
- Identify the different types of data standards and the importance of using those standards
- Define what a LIMS and LIS are, their capabilities, and how they differ from other systems used in the laboratory

### **CONTINUING EDUCATION**

The Centers for Disease Control and Prevention Division of Laboratory Systems is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program. This course is approved for 2 contact hours. P.A.C.E.® course number: 288-006-18.

For a complete list of courses, visit www.cdc.gov/labtraining.

# INTRODUCTION TO LABORATORY INFORMATICS: LIFE OF A RESULT

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## DESCRIPTION

Laboratory informatics is the specialized application of information technology to enable and enhance scientific processes and the delivery of laboratory information. It is a critical part of today's laboratory operations, helping to ensure high quality and reliable data and results.

This basic-level eLearning course is the second of a twopart introductory module on laboratory informatics. The course provides information on the role and processes of laboratory informatics through exploration of the "life of a result" as data and results move through the laboratory and outside the laboratory. Topics covered include characterization of the recipients of laboratory data, data and results storage, and the communication of data and results (especially electronically) to various stakeholders.

## **AUDIENCE**

This online course is designed for public health and clinical laboratory staff (including managers and leaders) and persons interested in the role and importance of informatics to the operation and mission of the laboratory.

This course is intended for learners who have taken the first course in the two-part module– *Introduction to Laboratory Informatics: Life of a Specimen*.

### **SPECIAL NEEDS**

Course content is closed captioned, where applicable, and optimized for a screen reader.

### **FREE REGISTRATION**

- Locate the course online at <u>www.cdc.gov/labtraining</u>
- Follow the link to register for the course in TRAIN
- If you have difficulty with the online registration process, please email labtraining@cdc.gov



## **OBJECTIVES**

At the conclusion of this course, the participant will be able to:

- Identify where and how data and results are stored inside the laboratory
- Recognize how data and results are transmitted inside and outside the laboratory to stakeholders
- Identify two paths that data and results can follow to impact the health of individual patients and the public
- Recognize how the proper recording, coding, storage, and transmission of data and results can impact patient care and public health
- Identify what data standards are used, their purpose, and components involved
- Explain what Electronic Test Orders and Results (ETOR), Electronic Laboratory Reporting (ELR) and Electronic Health Record (EHR) are and how they differ

### **CONTINUING EDUCATION**

The Centers for Disease Control and Prevention Division of Laboratory Systems is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program. This course is approved for 2 contact hours. P.A.C.E.® course number: 288-007-18.

For a complete list of courses, visit www.cdc.gov/labtraining.