



CLINICAL AND  
LABORATORY  
STANDARDS  
INSTITUTE

1st Edition

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# CLSI PRE05™

## Processes for the Collection of Urine Specimens

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CLSI PRE05 includes important urine collection steps that are critical to patient care. It is important to follow standard processes to ensure that a quality specimen is collected.

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A guideline for global application developed through the Clinical and Laboratory Standards Institute consensus process.

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## Processes for the Collection of Urine Specimens

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### Abstract

Clinical and Laboratory Standards Institute PRE05—*Processes for the Collection of Urine Specimens* is written for laboratory and nonlaboratory personnel responsible for collecting, handling, and transporting urine specimens. This guideline also covers the assessment of the patient and the quality of urine for laboratory testing.

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## Foreword

Important diagnostic information is provided from laboratory testing of urine specimens. Proper collection and handling of urine specimens is critical to ensure accurate results are obtained. CLSI PRE05 is useful for patients and nonlaboratory health care professionals who are responsible for collecting, handling, and transporting urine specimens. Having clear collection and handling instructions for urine is key in providing accurate and quality laboratory results. Urine collections for female and male patients are differentiated as appropriate, per collection type.

### Overview of Changes

This guideline replaces CLSI GP16-A3, published in 2009, with an increased focus on preexamination processes to ensure a quality urine specimen collection.

**NOTE:** The content of this guideline is supported by the CLSI consensus process and does not necessarily reflect the views of any single individual or organization.

#### KEY WORDS

clean-catch midstream

pediatric urine collection

random urine collection

surgical urine collection

timed urine collections

urinalysis

urine collections

urine culture

Sample

# Chapter 1

## Introduction

Sample

# Processes for the Collection of Urine Specimens

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## 1 Introduction

### 1.1 Scope

CLSI PRE05 is written for patients, laboratories, and nonlaboratory health care professionals who are responsible for collecting and handling urine specimens. This guideline focuses on the steps needed for the collection of urine and techniques including sterile, nonsterile, and forensic evidence collections, such as:

- Clean-catch midstream
- Random
- Timed collections
- Straight catheter
- Indwelling catheter
- Pediatric
- Suprapubic
- Surgical or urostomy

Specimens obtained from the various collection techniques are used for urinalysis, chemistry, microbiology, molecular, toxicology, and cytology examinations. This guideline can be referenced and used by the global community while collecting, handling, and transporting urine specimens.

CLSI PRE05 does not include common steps in the preexamination process, such as patient ID or registration. These are covered in detail in CLSI PRE01.<sup>1</sup>

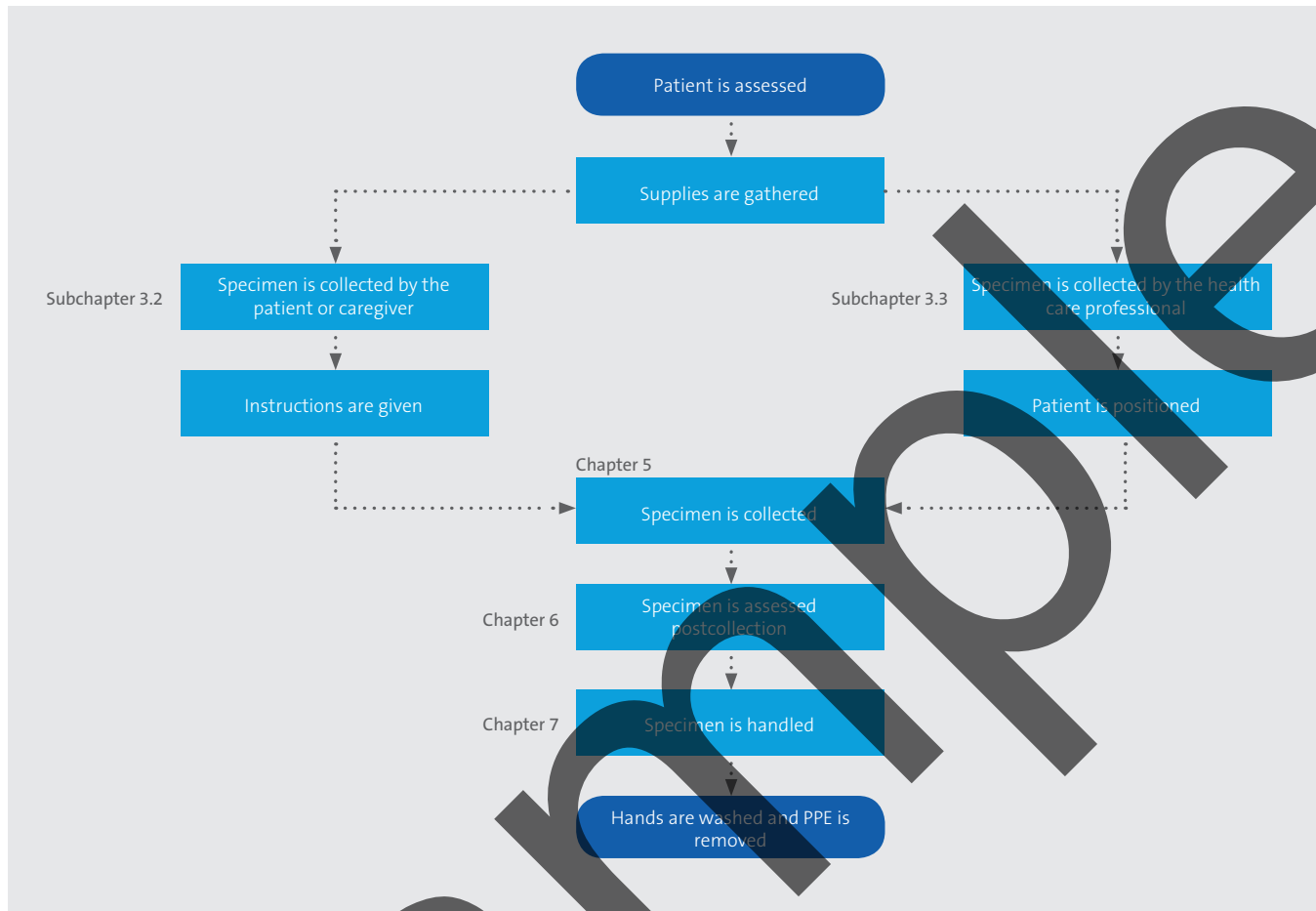
### 1.2 Standard Precautions

Because it is often impossible to know what isolates or specimens might be infectious, all patient and laboratory specimens are treated as infectious and handled according to “standard precautions.” Standard precautions are guidelines that combine the major features of “universal precautions and body substance isolation” practices. Standard precautions cover the transmission of all known infectious agents and thus are more comprehensive than universal precautions, which are intended to apply only to transmission of bloodborne pathogens. Published guidelines are available that discuss the daily operations of diagnostic medicine in humans and animals while encouraging a culture of safety in the laboratory.<sup>2</sup> For specific precautions for preventing the laboratory transmission of all known infectious agents from laboratory instruments and materials and for recommendations for the management of exposure to all known infectious diseases, refer to CLSI M29.<sup>3</sup>



## 2 Path of Workflow

Figure 1 outlines the process for collection, handling, and transportation of urine specimens.



Abbreviation: PPE, personal protective equipment.

<sup>a</sup> Three basic symbols are used in this process flow chart: oval (signifies the beginning or end of a process), arrow (connects process activities), box (designates process activities).

**Figure 1. Urine Collection Path of Workflow<sup>a</sup>**

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