

Proficiency Testing

APHL Quality Management System (QMS) Competency Guidelines

This course will help staff understand the minimum requirements for a suitable proficiency testing, and options to fulfill this requirement when external proficiency testing samples are not commercially available or are unacceptable. Alternatives to proficiency testing are provided.

Objectives:

1. Participant will learn what ISO/IEC 17025:2017 says about proficiency testing
2. Participant will learn what the laboratory needs to consider in proficiency testing
3. Participant will understand the role of proficiency testing
4. Participant will learn the alternatives available per the ISO standard to proficiency testing

Proficiency testing is an evaluation of the laboratory's performance on analysis of samples of external origin for the purposes of determining adequacy of the laboratory's pre-examination, examination, and post-examination activities. Alternative assessment is a system for determining the reliability of tests for which proficiency testing is either not available or not required. External assessment is a system to ensure compliance, competency, accuracy and precision of test system components, environment, and operator performance through evaluation by external groups or comparison using external samples.

What is Proficiency Testing?

...

7.7.1 The laboratory shall have a procedure for monitoring the validity of results. The resulting data shall be recorded in such a way that trends are detectable and, where practicable, statistical techniques shall be applied to review the results. Can include:

- Use of reference materials or quality control materials
- Participate in a round robin.
- Perform a comparison with another method.
- Perform an inter-laboratory comparison.
- Test previously run samples.
- Correlation of results for different characteristics of an item.
- Internal Check Samples



Public health laboratory competency guidelines:

Quality Management System (QMS) domain

QMS 11.02 External Assessments: Participates in external assessment activities

General (GEN) domain

GEN 7.02. Proficiency testing (PT) and alternative assessment: Performs PT and alternative assessment

GEN 7.03. Proficiency testing (PT) and alternative assessment reporting: Reports PT and alternative assessment

Microbiology (MCB) domain

MCB 6.02. Proficiency testing (PT) and alternative assessment: Performs PT and alternative assessment

Chemistry (CHM) domain

CHM 6.02. Proficiency testing (PT) and alternative

