

# NVLAP Assessor Training

## Proficiency Testing

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- NVLAP requires labs to participate in PT activities as a means to demonstrate technical competence
- PT is an integral part of the accreditation process
- Results of PT are considered during the evaluation process leading to an accreditation decision
- See NIST Handbook 150, 3.4 as amended by NVLAP Policy Guide PG-8-2011

# Definition of proficiency testing (From NIST Handbook 150, 1.5)

## 1.5.21

### **proficiency testing (laboratory)**

Determination of laboratory testing performance by means of **interlaboratory comparisons**.

## 1.5.9

### **interlaboratory comparisons**

Organization, performance and evaluation of tests or calibrations on the same or similar items or materials by two or more laboratories in accordance with predetermined conditions.

## International requirements

- ISO/IEC 17043, *Conformity assessment – General requirements for proficiency testing* (replaced ISO/IEC Guide 43)
- ILAC-P9:11/2010, *ILAC Policy for Participation in Proficiency Testing Activities*

## Overview

- Some LAPs have mandated PT programs; others do not
- However all labs must meet the requirements of NIST HB 150, 5.9, *Assuring the quality of test and calibration results*
- Monitoring the validity of tests & calibrations shall be planned and reviewed (5.9.1)
- PT may be organized by NVLAP or by an external provider of proficiency testing services
- Assessor involvement in monitoring and assessing PT activities differs between programs

## LAPs with mandated PT

- Requirements for lab participation are found in program-specific handbooks, which may be augmented by other program documents such as Lab Bulletins
- Additionally, some programs have PT requirements on the program webpage; for example, Calibration
- Requirements include minimum level and frequency of participation
- Examples of LAPs with mandated PT: Asbestos, Dosimetry, and Lighting LAPs

## LAPs with no mandated PT

- Where formal PT activities are not available or appropriate, NVLAP and the lab agree on suitable alternative means by which the lab's performance can be assessed and monitored as part of the laboratory's planned PT and/or related activities.
- Examples: ECT, Biometrics, and Voting LAPs

## Examples of PT activities (from NIST HB 1.5.21, Note)

- Qualitative schemes—for example, where laboratories are required to identify a component of a test item.
- Data transformation exercises—for example, where laboratories are furnished with sets of data and are required to manipulate the data to provide further information.
- Single item testing—where one item is sent to a number of laboratories sequentially and returned to the organizer at intervals.
- One-off exercises—where laboratories are provided with a test item on a single occasion.
- Continuous schemes—where laboratories are provided with test items at regular intervals on a continuing basis.
- Sampling—for example, where individuals or organizations are required to take samples for subsequent analysis

## PT nonconformities

- Unsatisfactory participation in any NVLAP PT program is a technical nonconformity that must be resolved in order to obtain or maintain accreditation
- Criteria for suspension based upon PT performance is found in program-specific handbooks
- Review of PT results early in the assessment will allow for observation of possible concern areas

## Summary

- PT is an integral part of the accreditation process
- Assessor involvement in review of PT plans and reporting PT activity is program dependent
- Early review of PT results and corrective actions may be a basis for depth of test method review for concern areas