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PROFICIENCY TESTING

What is Proficiency Testing (PT)?

Proficiency Testing (PT) is defined as the determination of the testing or calibration performance of a laboratory by means of interlaboratory comparison. PT schemes are used by Accreditation bodies as part of the process to assess the ability of laboratories to competently perform tests and measurements. It is a powerful quality assurance tool enabling laboratories to monitor their performance and can also be used as part of a laboratory's continuous improvement efforts.

How does PT operate?

Proficiency testing schemes operate by providing participating laboratories with samples containing specified material or analytes, but the actual concentration of the substance is known only to the PT provider. The laboratory analyses the samples, preferably as part of their normal routine and reports the results to the PT provider. The laboratory is then provided with a report showing how closely their results agree with the reference value. PT schemes vary according to the needs of the laboratory in which they are used, the nature of the PT item, the laboratory methods in use and the number of participants.

Benefits of Proficiency Testing:

- The results provide valuable information allowing the laboratory to identify any problems related to inadequate procedures, individual analyst performance or calibration of the equipment.
- It allows laboratories to determine whether or not they have satisfactory repeatability/reproducibility and precision for their routine activities.
- It helps laboratories determine circumstances under which their results tend to be satisfactory or tends toward random or systemic errors and which types of sample matrix testing they may need to further develop.
- Excess samples from a PT scheme can be used as Reference samples or CRM if samples can be adequately categorized and made traceable to a stated reference.
- It can be used as part of the laboratory's continuous improvement procedures.
- It can be used to verify the effectiveness of corrective actions.
- EQA programs (such as those provided in the medical area) provide insight into the complete path of workflow of the laboratory, i.e. pre-analytical, analytical and post-analytical phases of testing.
- It can be used to evaluate potential or continuing suppliers of testing services (e.g. referral or subcontracted laboratories).

To locate Proficiency Test Providers search - www.eptis.bam.de