



Q&A ATCC® *Excellence in Research* Webinar “Accuracy Matters – LGC Proficiency Testing Programs Offer Dependable Materials for Assessments with Trackable Online Results”

General Questions

1. Will we be able to download the presentation?

This presentation will be available to watch on demand on the ATCC website, or [click here](#).

2. How many participants are needed to obtain statistically relevant results?

This will depend on a number of factors, such as the distribution of the results returned, how the assigned value (AV) and the standards deviation for proficiency assessment (SDPA) have been derived etc. Where the AV and/or the SDPA have been derived from the participant’s results, results from at least 8 participants are required.

3. How do I join a proficiency testing program?

Participants are advised to participate in the program(s) that are most appropriate to their own area of testing. Where necessary, staff at LGC Standards PT can advise on which program is most suitable for participants.

For each program, a program description and application form will be available, containing information about the test materials included in the program, and the intended distribution dates. Participants are invited to complete the application form, indicating which test materials they wish to receive during the program year. If the availability of test materials changes during the program year, participants are kept fully informed.

Once a completed application form is received, an order confirmation will be sent to the participant, confirming the test materials selected and distribution date.

4. How often do I need to participate in proficiency testing?

The frequency that a laboratory needs to participate in proficiency testing depends on a wide range of factors specific to each individual laboratory, such other quality tools used, the volume of work undertaken and the risk associated to the measurements. Therefore, every individual laboratory may have a different need, which is why programs provided by LGC Standards PT offer flexible participation, although some do have a minimum participation level. Third parties such, as regulatory bodies, may recommend minimum levels of participation. To gain the benefit from trend analysis, participation in a minimum of four rounds over a program year is recommended.

5. How can I measure my laboratory's performance over time?

You can do this by trend analysis. A single result simply reflects the performance of the laboratory on the particular day that the test was carried out and therefore gives limited information. Frequent participation in PT programs over time can give greater insight into long-term performance and can help identify where internal bias may be occurring. One of the best methods of summarizing performance scores over time is graphically as this gives a clear overview and is less prone to misinterpretation than numerical methods. Participants are therefore advised to monitor their PT results over time. Further information regarding interpretation and trend analysis of proficiency results is given in the Eurachem Guide – Selection, Use, and Interpretation of Proficiency Testing (PT) Schemes.

6. What are the advantages of a z-score?

Results can be expressed in a form that is easy to interpret and understand; results can be summarized in graphical or tabular form to depict overall performance; a performance score allows participants to directly compare their own result with others; if consistent statistical values are applied, a performance score enables participants to monitor and trend their own performance over time. It is important to interpret any performance score in the full context of the overall results and in the context of a laboratory's own quality control measures.