

Specific Requirements for Drug Analysis Proficiency Tests

1. Test Design

- 1.1 Drug proficiency samples should measure sample handling and preparation skills, extraction skills, technical skills, analytical skills, data interpretation skills, and documentation skills. Consequently, proficiency tests which consist only of hard copy data to interpret are not acceptable.
- 1.2 Proficiency samples should consist of chemical substances of the composition and purity the individual is likely to encounter in casework. It is appropriate for samples to be prepared in mixtures with cutting agents (diluent or adulterants) or other controlled substances. The quantity of sample should be adequate for qualitative and quantitative analysis, and to allow reasonable duplication of test results.
- 1.3 In laboratories which routinely provide quantitative results in casework, the participant must also provide quantitative results in proficiency tests.
- 1.4 Sample preparation and analysis should be performed by the participant to the fullest extent possible. If certain routine, repetitive procedures are usually performed by another laboratory analyst or technician, then persons other than the participant may assist with the proficiency test. Interpretation of the proficiency test results, however, must be performed entirely by the individual participant.
- 1.5 Documentation provided to the laboratory staff member responsible for the proficiency test must include notes regarding sample handling, preparation, and extraction; instrumental data; detailed descriptions of non-instrumental test results; calculations for quantitative results; documentation of data interpretation and conclusions; and standard and control sample results.
- 1.6 Acceptable ranges for quantitative results may be established by the proficiency test provider, but must be verified by cumulative results and/or analysis by at least two qualified referee laboratories.
- 1.7 Individuals within a single laboratory may receive identical proficiency test samples, as long as the results are achieved independently by the individual participants.

2. Criteria for Successful Participation in a Drug Analysis Proficiency Test

- 2.1 The test provider will provide written notification to the laboratory staff member responsible for the proficiency test and/or the participant advising the results of his or her proficiency test. If applicable for commercial test providers, the laboratory staff member responsible for the proficiency test can verify the results given the participant's test code.
- 2.2 Correct results demonstrate a successful participation in the proficiency test.
- 2.3 Incorrect results demonstrate an unsuccessful participation in the proficiency test.

2.4 Inconclusive results may be judged as successful or unsuccessful participation, or non-participation in the proficiency test.

2.4.1 Inconclusive results will be reviewed by at least two members of the Drug Analysis Proficiency Review Committee to determine whether the participation in proficiency testing was successful or unsuccessful. If no conclusion can be reached, another member will review the results and render the final decision.