QUALITY MANAGEMENT IN VETERINARY LABORATORIES

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Quality assurance is not an add-on to laboratory management, an optional extra, it is part of the core business. Quality assurance depends critically on the management system of the laboratory and the controlled, systematic integration of all laboratory decision making and functions because the accuracy of laboratory test results is underpinned by every aspect of the running of the laboratory. It couldn’t be otherwise, because the purpose of the laboratory is to produce such test results.

A quality assurance system gives laboratory management a process by which to integrate, coordinate and monitor the effectiveness of its various functions. International standards such as the OIE Quality Standard and Guidelines for Veterinary Laboratories (2008) and the accompanying Chapter 1.1.4 in the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals provide useful approaches and frameworks for developing the laboratory quality assurance management system. Accredited quality assurance systems place emphasis on the broader aspects of laboratory management such as organisation and management, laboratory facilities and general environment, equipment inventory and maintenance, record keeping and purchasing and sub-contracting. Management of the actual test methods is just one section in a comprehensive oversight of laboratory activities addressed in the accredited quality assurance system.

In the performance of the diagnostic test quality assurance is underpinned by use of a reliable test method which has been validated for the purpose and animal population intended. The OIE Terrestrial Manual provides information on accepted test methods and standards for their validation in the laboratory. An important aspect of test quality assurance is participation in external comparisons such as proficiency testing, an area where reference laboratories could be showing more leadership. Challenges for the future include developing systems to bring new test technologies such as multiplexing and high throughput sequencing under quality assurance and developing the supporting proficiency testing strategies.