

RECOMMENDED STANDARDS FOR MODERN TUBERCULOSIS LABORATORY SERVICES IN EUROPE

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The principles underpinning the standards produced by the WHO European Laboratory Taskforce are that any tuberculosis (TB) laboratory diagnostic procedure should be performed by appropriately trained staff, working to standardized operating procedures in appropriately equipped and safe laboratories against clear national and international proficiency and quality standards. Quality should be the pre-eminent criteria, not cheapness.

The standards are technologically feasible but may not be within the financial capacity of all laboratories initially. Nevertheless the spread of multidrug resistant and extensive drug resistant TB has changed the world view emphasizing the need for a global expansion of culture and diagnostic centers and the importance of novel molecular diagnostic systems. Partnerships between reference laboratories, academia, industry and public-private partnerships such as FIND have demonstrated the superior performance and effectiveness of new laboratory diagnostic systems. It is increasingly realized that there is a requirement for government and international donors to adequately fund an appropriate safe infrastructure so that staff can deliver accurate and timely results at whatever level of activity they are performing. There is a need for national reference laboratories to train a new cadre of mycobacterial laboratory experts which will require the funding of appropriate individuals at these centres to train and then assist in the implementation of good practice and laboratory evaluation in the field to build sustainable capacity. Further operational research is needed to determine the optimal configuration of new technologies to determine isoniazid, rifampicin and second-line drug susceptibility in mycobacterial cultures but increasingly directly on specimens as well. Better integration of laboratory medicine as a core part of all TB programmes is needed to achieve and maximize the potential of new developments.