Collecting sputum specimens from patients is potentially hazardous and should not be performed in the laboratory. A well ventilated area that is separate from the laboratory should be identified for sputum collection. This area should preferably be outdoors.

Table 3. Risk precaution levels, associated laboratory activities and risk assessment for tuberculosis (TB) laboratories

Risk level of TB laboratory[a]	Laboratory activities	Assessment of risk
Low risk	Direct sputum-smear microscopy; preparation of specimens for use in an automated nucleic acid amplification test cartridge (such as the Xpert MTB/RIF assay)	Low risk of generating infectious aerosols from specimens; low concentration of infectious particles
Moderate risk	Processing and concentration of specimens for inoculation on primary culture media; direct DST (for example, line-probe assays on processed sputum)	Moderate risk of generating infectious aerosols from specimens; low concentration of infectious particles
High risk (TB-containment laboratory)	Culture manipulation for identification; DST or line-probe assays on cultured isolates	High risk of generating infectious aerosols from specimens; high concentration of infectious particles

DST, drug-susceptibility testing.

[a] The risk level refers to how likely it is that someone in the laboratory will become infected with TB as a result of procedures performed in the laboratory.