Assessment tool for laboratories implementing SARS-CoV-2 testing

Interim guidance 2 October 2020



Background

This tool has been designed to assess the capacity of laboratories that have implemented or intend to implement testing for SARS-CoV-2, the virus that causes coronavirus disease (COVID-19). The tool is a shortened version of the 2012 Laboratory assessment tool that is widely used to assess national laboratory systems and the capacity of laboratories.

The new tool incorporates core sections of the 2012 tool, while adding a section specifically on testing for SARS-CoV-2. Overall, the new tool enables rapid identification of strengths and weaknesses of a laboratory to determine the capacity for SARS-CoV-2 testing. The updated version includes additional translations (Portuguese and Russian) and three additional questions: 11.3 on the verification of the testing procedure for COVID-19, 11.11 on the assessment of staff competencies prior to initiating COVID-19 testing and 11.16 on the availability of the necessary consumables for COVID-19 testing. The capacity to perform nucleic acids extraction and RT-PCR is now assessed separately instead of jointly (questions 6.7 and 6.9, 7.16 and 7.18, 8.13 and 8.15). The term 'COVID-19 virus' was replaced by 'SARS-CoV-2' in the title of the tool and within the tool.

Please read this user guide before filling in the questionnaire. For additional information, a more complete version of this user guide can be found in the 2012 <u>Laboratory assessment tool</u>.

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The questionnaire is presented in an Excel spreadsheet using automatic calculations. There are no macros, so that the questionnaire can be used on any computer, independent of the operating system. The file includes 19 tabs with questions in English.

To switch from English to French, Spanish, Portuguese or Russian, select the "Language" tab, toggle the cell number A3 from 1 (English) to 2 (French), or 3 (Spanish), or 4 (Portuguese), or 5 (Russian). The tool is currently not available in other languages but, if translated, text in the other languages can be entered into the additional columns in the "Language" tab and by choosing the appropriate column number in cell A3.

To start the assessment, go to the "Lab" tab and fill in all the requested cells in column B. Then fill in all the requested cells (columns D and E) of the 11 specific module tabs and the gap analysis module. Questions in tabs 1 to 10 of the tool are intended to facilitate the assessment of core capacities of the laboratory and may include but are not limited to SARS-CoV-2 testing. The questions in tab 11 address specificities related to SARS-CoV-2 testing.

For most of the questions, clicking the small arrow on the righthand side of the answer cells (generally in column D) opens a box with the following authorized values: 1. Yes; 2. Partial; 3. No; 4. Not applicable. An error message will appear when trying to enter values other than those listed in the dropdown menu.

Other values can be entered (generally in column E) when asking "Number of equipment", "Number of tests performed", "Please describe", etc. A cross in column C indicates that documents are required for completing the answer. Additional information can be given in column E or in the comment box at the bottom of each module. When no answer is expected in column D (in the case of an open question for instance), the corresponding cell in column D is crossed out. All answers in grey or light blue colour cells in Column D will be taken into account to calculate the capacities indicators.

Please do not try to modify or rename the tabs as these are protected and such changes may result in calculation errors or compromise interpretation of the data.

Use the "Summary" tab to visualize the average indicator for the laboratory core capacities and the indicator for SARS-CoV-2 /COVID-19 testing capacity and capability. The indicators and graphics, automatically generated, will direct the assessors and decision makers towards the capacities that may require immediate attention and strengthening. You may add photographs, additional comments and conclusions in the dedicated text boxes as needed.

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

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