

<b>Title</b>	GENEXPERT TRIAGE GUIDE
<b>TB toolbox CODE</b>	DSPu-TB_DETECT-GUIDE-TRIAGE-GX_EN
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## KEY POINT

- GeneXpert is a rapid and sensitive diagnostic tool specifically for *Mycobacterium tuberculosis* which tests sputum specimens from people suspected of having pulmonary TB.

## PURPOSE

- Quickly detecting, thanks to GeneXpert (PCR), the presence of *M. tuberculosis* in the sputum of persons suspected of having active TB.
- Using GeneXpert results to determine, when there is no X-ray unit on site, the appropriate transfer method for a patient suspected of having active TB.

## OBJECTIVES

- Understand the GeneXpert triage steps for suspected active TB cases.
- Offer optimal follow-up during the GeneXpert triage, based on established parameters.
- Transfer patients suspected of having active TB from a village to a hospital centre as per public health standards.

## RESPONSIBILITIES

- The **nurse** obtains sputum samples, based on the availability or lack of a portable negative pressure tent on site.
- The **physician** interprets the GeneXpert results and analyzes the medical condition of the patient to identify the most suitable transfer method.
- When a GeneXpert result is positive, the **physician** discusses the conditions of the transfer with the TB consulting physician or the Public Health physician on call.

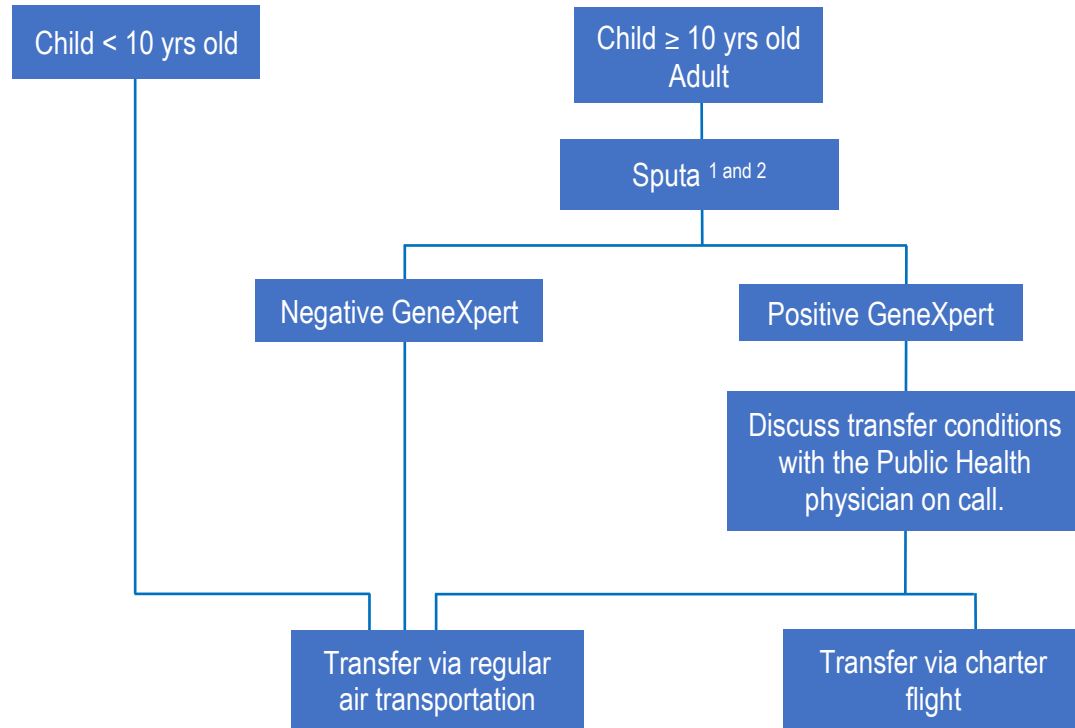
## SPUTUM SPECIMEN COLLECTION

- When a portable negative pressure tent is available on site, sputum induction can be used to collect specimens and thereby obtain more sensitive diagnoses of active TB (pulmonary) by PCR. (Information on the required quality samples can be found in the [Sputa induction protocol for BK tests](#)).
- However, as part of a triage to determine the method of transferring a patient to the health centre, a PCR analysis by spontaneous expectoration (ideally in the morning) for a patient able to do so is deemed valid. Once at the health centre, the bacteriological specimens collected will need to be enhanced by a series of provoked sputum collection measures as described in the [Sputa induction protocol for BK tests](#).

## TRANSFER PROCEDURE

- The patient is transferred by charter flight if the GeneXpert test is positive and such a transportation method is recommended by Public health authorities or if the patient's clinical condition requires a quick transfer.
- A patient with a negative GeneXpert result can travel by regular air transportation.

## Genexpert triage guide: clinical decision-making algorithm.



<sup>1</sup> Requires a medical prescription.

<sup>2</sup> Option A: availability of a portable negative pressure tent: induced sputa x 4\* (1 for GeneXpert, 3 for smears and cultures). Collection samples for smears and cultures should not delay GeneXpert testing of the sample, nor a patient's transfer to a health centre when necessary.

\* For further details, see the document *Sputa induction protocol for BK tests*.

Option B: no portable negative pressure tent at the site: spontaneous sputa x 1 for GeneXpert, outside of the CLSC or the home, on an empty stomach, one hour prior to the test.