

STEP-BY-STEP GUIDELINES FOR COLLECTION OF THE SPONTANEOUS SPUTUM SAMPLE AT THE LOCAL CLINICS OR AT THE HOSPITAL OF OUT-PATIENTS WHOSE COLLECTIONS WERE NOT SATISFACTORY AT THE PATIENT'S HOUSE. THE OBJECTIVE OF THIS COLLECTION IS TO CONFIRM THE DIAGNOSIS OF PULMONARY TUBERCULOSIS, PULMONARY DISEASE BY NON-TUBERCULOUS MYCOBACTERIA OR FOR TREATMENT FOLLOW-UP OF ANY OF THESE DISEASES

### RECOMMENDATIONS OF FAST AND WATER INGESTION PRIOR TO COLLECTION

AT THE DATE PRIOR TO SPUTUM COLLECTION, THE HEALTH CARE WORKER, PROPERLY WORN WITH N95 MASK, SHOULD:

- 1. ADVISE TO THE PATIENT TO ARRIVE AT THE PLACE AT TIME AND DATE SCHEDULED;
- 2. RECOMMEND TO THE PATIENT REMAIN ON FAST OF AT LEAST 6 h;
- 3. RECOMMEND TO THE PATIENT TO INGEST WATER AS MUCH AS POSSIBLE DURING THE NIGHT PRIOR TO THE COLLECTION DATE. WATER INGESTION IS ALLOWED DURING THE FAST PERIOD;
- 4. CERTIFY THAT THE PATIENT KNOWS THE ADDRESS AND THE WAY TO ARRIVE AT THE PLACE;
- **5.** IN THE MORNING OF THE COLLECTION DATE, ADVISE THE PATIENT NOT TO MAKE ORAL HYGIENE WITH TOOTH CREAM;
- **6.** INFORM THAT TOOTH BRUSHING, RINSING THE MOUTH and GARGLING WITH WATER ARE ENOUGH AND INDISPENSABLE. THEY WILL BE PERFORMED AT THE PLACE OF THE COLLECTON AND NOT AT HIS HOUSE.

#### VIAL PREPARATION

THE HEALTH CARE WORKER SHOULD:

1. WASH THE HANDS PRIOR TO THE VIAL PREPARATION;



2. CHOOSE A STERILE AND SCALED VIAL WITH TRANSPARENT WALLS, MINIMAL AND MAXIMAL VOLUMES OF 35 ml and 50 ml, respectively, MAXIMAL HEIGHT of 40 mm and TWISTING TAP with a DIAMETER of 50 mm, according to the illustration below;



Boca larga= large mouth; tampa rosqueável= twisting tap; plástico transparente= transparent plastic, capacidade de 35 ml a 50 ml= minimal and maximal volumes of 35 ml and 50 ml, respectively; pote descartável= disposable vial; altura mínima= minimal height; etiqueta do frasco – Nome completo= full name, data=date: xx/yy/zz

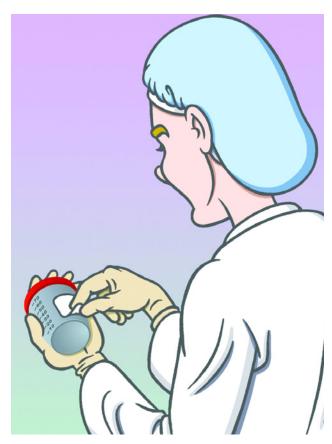
- 3. OPEN THE PLASTIC BAG OF THE COLLECTION VIAL TAKE THE VIAL OFF WITHOUT UNTWISTING THE TAP and DISCARD THAT IN THE COMMON TRASH;
- 4. RECORD THE PATIENT NAME AND THE COLLECTION DATE IN A LABEL;



5. FIX THE LABEL ON THE EXTERNAL WALL OF THE COLLECTION VIAL;



7. 10 ml LINE MUST BE POINTED OUT WITH BLACK RETO-PROJECTOR PEN TO MAKE EASIER THE OBSERVATION OF THE LEVEL TO BE REACHED WITH THE SPUTUM.



6. DO NOT FIX THE LABEL OVER THE VOLUME SCALE OR OVER THE TAP;

### HYGIENE OF THE TEEH AND ORAL CAVITY

BEFORE THE PATIENT GETS INTO THE PLACE, THE HEALTH CARE WORKER, PROPERLY WORN WITH N95 MASK, SHOULD:

- 8. WELLCOME THE PATIENT;
- 9. DELIVER THE WHITE SURGICAL MASK TO THE PATIENT AND ADVISE HIM WHO TO FIX THAT ON HIS FACE;



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- 10. EXPLAIN TO THE PATIENT THAT THIS MASK SHOULD BE FIXED OVER HIS FACE UNTIL THE PLACE OF THE COLLECTION PROCEDURE OR IN CASE THE PATIENT MOVES TO OTHER PLACES (e.g.: GO TO THE BATHROOM OR TO THE RADIOLOGY SERVICE);
- **11**. CERTIFY THAT THE PATIENT RESPECTED FAST OF AT LEAST 6 h PRIOR TO THE SPUTUM COLLECTION;
- 12. CERTIFY THAT THE PATIENT DID NOT PERFORM ORAL HYGIENE AND TOOTH BRUSHING AT HIS HOUSE;
- **13**. ASK THE PATIENT TO GO TO THE BATHROOM FOR THE FOLLOWING PROCEDURES:
- a) TAKE THE WHITE SURGICAL MASK OFF THE FACE;



b) WASH THE HANDS WITH WATER AND SOAP and, LATER ON, DRY THEM WITH PAPER TOWEL;





c) REMOVE ANY TOOTH PROTHESIS;



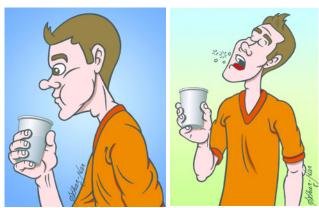


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# d) BRUSH THE TEETH WITH TOOTH BRUSH DAMPENED WITH FILTERED WATER TO REMOVE ANY FOOD RESIDUE OF THE TEETH, GINGIVAS and TONGUE;



e) RINSE THE MOUTH and GARGLE WITH FILTERED WATER and



f) FIX AGAIN THE WHITE SURGICAL MASK OVER THE FACE.



## ENVIRONMENTAL PREPARATION FOR SPUTUM COLLECTION

THE HEALTH CARE WORKER, PROPERLY WORN WITH N95 MASK, SHOULD:

1. ASK THE PATIENT TO SIT TO BEGIN THE COLLECTION;



2. KEEP A TABLE NEAR THE PATIENT TO SUPPORT THE COLLECTION VIAL;



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- 3. PUT THE COLLECTION VIAL IN AN EASY AND ACCESSIBLE PLACE TO THE PATIENT;
- 4. DELIVER DISPOSABLE PAPER TOWEL TO REMOVE EXPECTORATION IN CASE IT REMAINS OVER THE LIPS. IT IS FORBIDDEN TO REMOVE THE EXPECTORATION WITH THE VIAL DUE TO THE RISK OF SAMPLE CONTAMINATION;



- **5.** PUT A FILTERED WATER BOTTLE AND A CUP OVER THE TABLE IN ORDER THE PATIENT CAN DRINK DURING THE COLLECTION PROCEDURES and
- **6.** ASK THE PATIENT TO TAKE THE WHITE SURGICAL MASK OFF THE FACE AND PUT THAT IN ANY EASY AND ACCESSIBLE PLACE.

## SIMULATION OF THE PROCEDURES FOR SPUTUM COLLECTION

THE HEALTH CARE WORKER, PROPERLY WORN WITH N95 MASK, SHOULD EXPLAIN TO THE PATIENT IN FEW WORDS USING A SIMPLE AND OBJECTIVE LANGUAGE THE PROCEDURES TO COLLECT THE SAMPLE OF SPONTANEOUS SPUTUM. SIMULATE THE PROCEDURES TO MAKE EASIER THE UNDERSTANDING BY THE PATIENT:

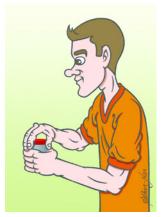
- 1. INFORM TO THE PATIENT THE IMPORTANCE OF THE COLLECTION PROCEDURE FOR TUBERCULOSIS DIAGNOSIS;
- 2. EXPLAIN THAT THE SPUTUM IS A FLUID WHICH COMES FROM THE LUNGS, AFTER COUGHING.

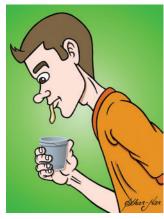
THEREFORE, PATIENT'S COLLABORATION TO COUGH IS INDISPENSABLE;

- 3. ADVISE THE PATIENT TO:
- a) BREATH DEEPLY, KEEP THE AIR INSIDE THE LUNGS FOR SOME SECONDS and, LATELY, EXPIRATE;



- b) THESE PROCEDURES SHOULD BE REPEATED THREE TIMES and
- c) IMMEDIATELY AFTER, STIMULATE THE PATIENT TO COUGH;
- d) WHILE COUGHING, THE PATIENT SHOULD UN-TWIST THE COLLECTION VIAL TAP, OPEN THE VIAL, CURVE THE HEAD OVER THE VIAL, WITHOUT TOUCHING THE LIPS, CHIN or CHEEKS IN ANY AREA OF THE VIAL OR OF ITS TAP and EXPECTORATE INSIDE THE VIAL;





e) DO NOT TOUCH THE FINGERS IN THE INTERNAL PART OF THE VIAL;

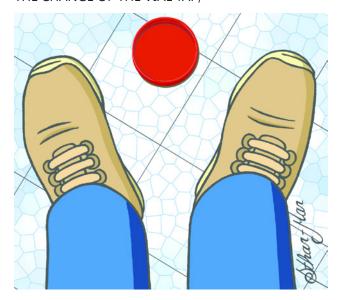
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f) AT THE END OF EACH EXPECTORATION, ADVISE THE PATIENT TO CLOSE THE VIAL COMPLETELY TWISTING THE TAP;



4. ALERT THE PATIENT TO AVOID THE VIAL TAP FALLING ON THE FLOOR. IN CASE IT HAPPENS, THE PATIENT SHOULD ASK TO THE HEALTH CARE WORKER THE CHANGE OF THE VIAL TAP;



- 5. OBSERVE THE FIRST EXPECTORATIONS AND THE PROCEDURES THE PATIENT ADOPTS TO EXPECTORATE INSIDE THE VIAL. CORRECT THE PATIENT WHENEVER NECESSARY;
- 6. SUPERVISE THE COLLECTION AS MANY TIMES AS POSSIBLE TO EVALUATE IF THE INSTRUCTIONS ARE BEING RESPECTED. DURING THE SUPERVISIONS, STIMULATE THE PATIENT TO CONTINUE THE COLLECTION UNTIL THE VOLUME OF 10 ml;
- 7. IN CASE OF DIFFICULTIES, ASSIST THE PATIENT DURING THE COLLECTION PROCEDURES UNTIL HE IS ABLE TO PERFORM ALL THE PROCEDURES BY HIMSELF;
- 8. IN CASE THE EXPECTORATION FALLS OVER THE EXTERNAL WALL OF THE VIAL, THE HEALTH CARE WORKER SHOULD IMMEDIATELY REMOVE THAT USING PAPER TOWEL AND DECONTAMINATE WITH PHENOL SOLUTION 5%:



- 9. THE IMPORTANCE OF COLLECTING 10 ml MUST BE EXPLAINED TO THE PATIENT; POINT OUT THAT THE FOAM WILL NOT BE REGARDED TO REACH THIS VOLUME;
- 10. THERE IS NO TIME LIMITS FOR SPUTUM COLLECTION; WAIT THE TIME THAT YOU CONSIDER NECESSARY TO COLLECT 10 ml OF SPUTUM OR ANY **VOLUME NEAR THIS VALUE;**
- 11. ADVISE THE PATIENT TO REPEAT THESE PROCEDURES AS MANY TIMES AS NECESSARY UNTIL REACHING THE MARK IN THE VIAL WALL;
- 12. IN CASE THE PATIENT IS NOT ABLE TO EXPECTORATE 10 ml, THE HEALTH CARE WORKER SHOULD STIMULATE THE PATIENT TO EXPECTORATE MAXIMAL VOLUME NEAR THIS VALUE; AT LEAST 5 ml and
- 13. THE COLLECTION PROCEDURE WILL BE ENDED WHEN THE VOLUME of 10 ml IS REACHED or THE POSSIBLE MAXIMAL VOLUME.

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# TRANSPORTATION OF THE VIAL TO THE FREEZER

THE HEALTH CARE WORKER, PROPERLY WORN WITH N95 MASK, SHOULD:

- 1. ONCE THE COLLECTION PROCEDURE IS CONSIDERED ENDED BY THE HEALTH CARE WORKER, HE MUST PUT THE VIAL CLOSED INSIDE A TRANSPARENT PLASTIC BAG AND CLOSE THIS BAG WITH A KNOT and
- 2. STORE THE VIAL INSIDE THE REFRIGERATOR RESERVED FOR CONTAMINATED MATERIAL UNDER 2-8°C TEMPERATURE UNTIL ITS TRANSPORT TO THE LABORATORY.



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