



Standard Operating Procedure

Procedure for Saliva Collection

I. POLICY: The Puerto Rico Clinical and Translational Research Consortium (PRCTRC) ensure the safety and well-being of employees, students, and laboratory personnel in the collection and transportation of biospecimens.

II. PURPOSE: The objective of this Standard Operating Procedure (SOP) is to outline the proper collection and transportation of samples in the Puerto Rico Clinical and Translational Research Consortium facilities (between the examination rooms and the laboratory). This procedure also ensures that the integrity of the specimens is preserved for accurate analysis by the receiving laboratory.

III. Area(s) of Responsibility: This SOP applies to the Principal Investigator (PI), laboratory personnel, research staff, and all authorized collaborators including students and research participants.

IV. Procedures: Saliva sampling should take place in a calm environment. Good preparation before taking the samples and a clear understanding of the procedure are very important:

- Clearly explain the procedure to the participant before sampling.
- When collecting samples ensure that the participant has not eaten or drunk anything for at least 30 minutes before collection.
- Other recommendations include: research participants should not brush their teeth within 45 minutes prior to sample collection; dental work should not be performed within 48 hours prior to sample collection.
- Participants should be screened for oral health problems or injuries.
- Saliva samples visibly contaminated with blood should be discarded and recollected.

Verify that the participant has signed the informed consent document and the ID assigned. Make sure you have all the equipment before starting, including personal protection equipment. Always observe universal precautions.

Materials:

1. Cool box with ice packs (for storing samples in the until they can be frozen).
2. Biohazard transport bags.

3. Collection tubes.
4. Drinking water.
5. Hand towels.
6. Permanent ink pens for labelling tubes.
7. Absorbent paper.
8. Personal protection equipment (gloves, face shield, coat).
9. Disinfecting wipes
10. Biohazard waste container.

Collection and Transportation Procedure:

1. Prepare the sample collection area with absorbent paper.
2. Ask the participant to rinse his/her mouth with water to remove food residue before sample collection, and swallow to increase hydration.
3. Label collection tubes with the permanent ink marker before starting saliva sampling.
4. Specimens should be collected following universal precautions. Wear your personal protective equipment.
5. Once the participant finishes the sampling, containers must be firmly closed to prevent loss of water by evaporation, and cross-contamination between samples. One mL (excluding foam) is adequate for most tests. Collection of samples to be analysed for more than one analyte may require larger vials.
6. Record all dates and times of saliva collection on the saliva report form as well as on collection tubes. Copy this information to a spreadsheet as soon as possible.
7. Pack samples individually in separate leak-proof biohazard transport bags. Precautions must be taken to avoid cross-contamination between different participant samples.
8. To minimize bacterial growth, saliva samples should be stored in a cool box until they can be transferred to a freezer at -20°C or colder for storage until analysis. Freeze-thaw cycles should be minimized for some analytes.
9. At the end of the procedure, decontaminate the area with disinfecting wipes and dispose correctly of all the used materials (regular and biohazard trash) in the containers available in the area.
10. Transport containers (cool box) must have biohazard label affixed. Labels that may be used include the standard "BIOHAZARD" symbol. All labels must be visible.
11. Specimens should be sent to the laboratory as soon as possible.

- Transportation shall be accomplished in such a way as to minimize any damage to the specimens or containers.
 - Materials must not be left at a receiving area or in an office or laboratory unless a responsible individual takes custody of the material.
 - Laboratory personnel will receive the samples; register them on the log book and store them in the freezer for future analysis.
 - Persons transporting, processing and/or shipping specimens will maintain training documentation as required per Institutional Biosafety Committee policy.
12. Laboratory personnel will prepare the working surface with absorbent paper to receive the samples, verify that are properly identified and store them following the protocol temperature requirements.
 13. At the end of the procedure, discard the absorbent paper in the biohazard waste container.
 14. Decontaminate the working surface with germicidal wipes and discard them in the biohazard waste container.
 15. Sign the maintenance records for “Laboratory Daily Maintenance”.

V. Exposure Control:

1. In the event of a spill of biological materials in transport, call 787-766-3062 (OSLI-Office for Safety in Research Laboratories), and/or 787-758-2525, ext. 1054/1707 (CASSO-Occupational, Health, Safety and Environment Office).
2. If a potential exposure occurs, notify the Occupational Health Clinic, 787-758-2525, ext. 2913.