ABSTRACT

The common methods of sample collection for the detection of SARS-Cov2 are either pharyngeal or nasopharyngeal. Both these methods require specific swabs that are in short supply, and both methods are not easily self-administered. A nasal swab can also be used to collect samples and is relatively easy to self-administer, yet obtaining nasal specific swabs can now also be a challenge. In order to address these issues, our group has optimized a protocol for self-administered nasal collection using buccal swabs that are not currently in high demand. With this method, we have been able to collect human samples with reliable results in RNA extraction based on RNaseP, and can detect SARS-Cov2 in known positive cases of COVID-19.

GUIDELINES

Be sure all materials are present prior to collection and all of the paperwork is in order.

MATERIALS

- Swabs (Fisher, NC9679349) NOTE: We substitute buccal swabs for nasal swabs as they are not in high demand
- Spray bottle with 70% ethanol
- Biohazard bags (autoclavable plastic)
- Cooler
- Ice packs
SAFETY WARNINGS

Appropriate PPE must be worn while at the collection site. Care must be taken to maintain distance between the individual collecting the sample and the individual self-swabbing.

Directions for the individual collecting the sample

1. Pick up swabbing kit and transport to the collection site (kit contains buccal swab, cooler, ice packs, spray bottle with 70% ethanol, biohazard bags, and necessary paperwork).

2. Put on appropriate PPE.

3. Establish contact with the individual to be swabbed and provide instructions.

4. Take the swab out of the kit, place it on a clean surface, and back away so the individual self-swabbing can pick up the swab.

Directions for individual self-swabbing

5. Blow your nose.

6. Wash your hands with soap and water.
7 Pick up swab the sample collector has delivered. Remove swab from its sleeve. Open sleeve the whole way and lay the swab on the opened sleeve.

8 Remove swab AND lid together.

9 Insert swab gently into your nostril until you meet some resistance. Gently scrub all sides of the nostril and then leave the swab in place for 15 seconds. Repeat in the other nostril.

10 Remove swab, slide into tube and secure lid.

11 Holding the lid shut, pull straight on the handle to remove stick through the opening and leave swab pad in tube. Insert plug securely. Discard stick.

12 Place the tubes in biohazard bag.

13 Place the biohazard on a clean surface and back away.

Directions for the individual collecting the sample

14 Decontaminate the exterior of the biohazard bag with 70% ethanol.
15 Place the biohazard bag in the cooler on top of cooler packs

16 Remove PPE before returning to your vehicle.

17 Transport the cooler and swabbing kit to the site for sample processing and place in a 4°C fridge or coldroom