

COVID-19 ANTIGEN TESTING: BIOSAFETY GUIDANCE

Based on the biosafety risk assessment, this document describes recommended biosafety practices to protect personnel and the work area from contamination with SARS-CoV-2 when collecting and testing specimens for COVID-19 using an antigen test (ex. BD Veritor or Quidel Sofia). While generally applicable, each facility may encounter unique situations requiring deviation from these recommendations. Personnel involved in such decisions should always consider how to minimize risk of contamination and transmission to other personnel and building occupants.

SPECIMEN COLLECTION

- Specimen collection and handling presents the greatest risk to personnel. Proper training and use of personal protective equipment (PPE) is very effective in reducing risk of exposure.
- If possible, have patient self-collect nares swab to minimize the use of PPE and the risk of exposure to personnel.
 - During self-collection, personnel should remain >6 ft. away and wear glove when handling specimens.
 - If the swab is collect by the healthcare provider, that personnel must maintain proper infection control and use recommended PPE, which includes an N95 or higher-level respirator (or facemask if a respirator is not available), eye protection, gloves, and a gown, when collecting specimens.
- If swab is collected away from the instrument location, patient or testing personnel should place swab back into sterile packaging, then into a Ziploc bag, and seal. Be careful not to contaminate exterior of bag.
 - Change gloves after handling materials that could be contaminated, and prior to touching any commonly touched surfaces like doorknobs, light switches, railings, counter tops, the primary work surface, or the test instrument.

SPECIMEN TESTING

Engineering Controls

- Place the instrument and test location away from high-traffic areas that is accessible by authorized personnel only.
- The procedure may suggest performing the test in a biological safety cabinet/hood. This is preferable when working in a laboratory, but the test can be performed safely without a biological safety cabinet/hood by using good biosafety practices, including the Administrative Controls and PPE described below.

Administrative Controls

- Clean area with 60-70% ethanol or other approved disinfectant prior to setting up test area. Use an EPA approved disinfectant effective against SARS-CoV-2 (COVID-19).
- Always wear gloves in the testing area. Especially when touching/handling patient specimens, work surfaces, test instrument, reagents, or other test materials.
- Change gloves frequently and especially between patients/patient specimens and prior to touching commonly touched surfaces.
- All test procedures should be performed over an absorbent surface, like paper towels or an absorbent pad.
- When removing swab from Ziploc bag and packaging. The swab stick is contaminated, be cautious to minimize cross contamination. Change gloves frequently, especially before touching any commonly touched surfaces, including the test instrument.
- Take caution when rolling the swab against the inside of the reagent tube (Quidel Sofia) or swirling the swab/squeezing the tube (BD Veritor). Keep swab as deep inside tube as possible to reduce the likelihood of flicking the tube contents out of the tube. Hold the tube firmly so it doesn't spill or fling out of your hand.
- Dispose of swab in a properly marked biohazardous waste container. A sharps container is recommended/preferred since swabs can sometimes pierce through a standard waste bag.
- Discard used Test Cassette in a properly marked biohazardous waste container and immediately change gloves.
- After each test, change gloves and decontaminate work surface and test instrument using 60-70% ethanol or other approved disinfectant.
- All waste should ultimately be disposed of as regulated medical waste in accordance with local requirements.
- After all testing is complete and decontamination of all work surfaces and the test Instrument has been performed, remove PPE being careful not to contaminate bare skin.
- Thoroughly wash hands with soap and water for at least 20 seconds or perform alternate hand hygiene.

PPE

- CDC recommends using the following PPE when performing antigen testing: gloves, gown/lab coat, mask, and face shield or goggles.