Official websites use .gov A .gov website belongs to an official government organization in the United States. Secure .gov websites use HTTPS A lock ( ) or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites. View Previous Updates CDC has guidance for who should be tested, but decisions about who should be tested are at the discretion of State, Tribal, Local, and Territorial (STLT) health departments and/or healthcare providers. Testing for other pathogens by the provider should be done as part of the initial evaluation, as indicated, but should not delay testing for SARS-CoV-2, the virus that causes COVID-19. For healthcare providers collecting specimens or working within 6 feet of patients suspected to be infected with SARS-CoV-2, maintain proper infection control and use recommended personal protective equipment (PPE), which includes an N95 or higher-level respirator (or face mask if a respirator is not available), eye protection, gloves, and a gown. For healthcare providers who are handling specimens, but are not directly involved in collection (e.g. handling self-collected specimens) and not working within 6 feet of the patient, follow Standard Precautions. Healthcare providers should wear a form of source control (face mask) at all times while in the healthcare facility. Healthcare providers can minimize PPE use if patients collect their own specimens while maintaining at least 6 feet of separation. For example, the provider should wear a face mask, gloves, and a gown. Respiratory specimens should be collected as soon as a decision has been made to test someone, regardless of the time of symptom onset. The guidance below addresses options for collecting specimens. Proper specimen collection is the most important step in the laboratory diagnosis of infectious diseases. A specimen that is not collected correctly may lead to false or inconclusive test results. The following specimen collection guidelines follow standard recommended procedures. For diagnostic testing for current SARS-CoV-2 infections, CDC recommends collecting and testing an upper respiratory specimen. Contact the testing laboratory to confirm accepted specimen types and follow the manufacturer instructions for

specimen collection. Sterile swabs should be used for the collection of upper respiratory specimens. This is important both to ensure patient safety and preserve specimen integrity. Note that nasopharyngeal and oropharyngeal specimens are not appropriate for self-collection. Testing lower respiratory tract specimens is also an option. For patients who develop a productive cough, sputum can be collected and tested for SARS-CoV-2 when available. However, the induction of sputum is not recommended due to the possibility of aerosol production during the procedure. Under certain clinical circumstances (e.g., for those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage specimen can be collected and tested as a lower respiratory tract specimen. Nasopharyngeal specimen (NP) collection /Oropharyngeal (OP) (throat) specimen collection (performed by a trained healthcare provider, only) Use only synthetic fiber swabs with thin plastic or wire shafts that have been designed for sampling the nasopharyngeal mucosa. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and may inhibit molecular tests. CDC recommends collecting only the NP specimen, although an OP specimen is an acceptable specimen type. If both NP and OP specimens are collected, combine them in a single tube to maximize test sensitivity and limit use of testing resources. Instructions for collecting an NP specimen (performed by a trained healthcare provider): Instructions for collecting an OP specimen (performed by a trained healthcare provider): Nasal mid-turbinate (NMT) specimen (performed by a healthcare provider or the patient after reviewing and following collection instructions): Visual guides Anterior nasal specimen (performed by a healthcare provider or the patient after reviewing and following the collection instructions): For a visual guide, see the How To Collect An Anterior Nasal Swab Specimen For COVID-19 Testing infographic [371 KB, 2 pages]. Nasopharyngeal wash/aspirate or nasal wash/aspirate (performed by a trained healthcare provider) For an additional visual guide, see the Nasopharyngeal/Nasal Aspirate or Nasopharyngeal/Nasal Wash sections

in the Influenza Specimen Collection infographic. Saliva (collected by patient with or without supervision) Collect 1-5 mL of saliva in a sterile, leak-proof screw cap container. No preservative is required. Follow additional instructions from the healthcare provider or manufacturer. Breath (performed by a qualified, trained operator under the supervision of a healthcare provider licensed or authorized by state law to prescribe tests) Follow the instructions as explicitly described within the test's Emergency Use Authorization (EUA) Instructions for Use. Bronchoalveolar lavage, tracheal aspirate, pleural fluid, lung biopsy (generally performed by a physician in the hospital setting) Sputum (collected under the guidance of a trained healthcare professional) Note: This is an aerosol-generating procedure and likely to generate higher concentrations of infectious respiratory aerosols. Aerosol-generating procedures potentially put healthcare providers and others at an increased risk for pathogen exposure and infection. Healthcare providers should maintain proper infection control, including standard precautions, and wear an N95 or equivalent or higher-level respirator, eye protection, gloves, and a gown, when collecting specimens. The US Department of Health and Human Services (HHS) is directly distributing nasopharyngeal (NP) swabs, based on state and territory testing plans that were submitted in response to the Coronavirus Aid, Relief, and Economic Security (CARES) Act requirements. Allocations were predetermined to maximize state and territory testing using a data-driven algorithm based on population, high incidence areas, and COVID-19 Task Force's directives. A monthly web-based survey goes out to each state and territory where they can request the number of swabs required. For swab requests, delivery site changes, or other related requests contact COVID19.TestSupplies@hhs.gov. HHS is no longer distributing viral transport media (VTM). If it is unavailable for purchase, CDC has posted a standard operating procedure for the preparation of VTM. Saline is also an acceptable transport medium for some COVID-19 viral assays, including the Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay. Check the Instructions for Use (IFU) to see which

transport medium is acceptable. Self-collection of specimens, both unsupervised and supervised by a medical professional, is currently available for specific tests authorized by the FDA. Additional authorized diagnostic tests for the detection of SARS-CoV-2 will likely have this capability as well. Laboratories should confirm the specimen has been obtained correctly and from the individual that is being tested. Generally, Clinical Laboratory Improvement Amendments (CLIA) requires laboratories to ensure positive specimen identification and optimum integrity of a patient's specimen using at least two separate (distinct) or unique identifiers, such as patient's name or another unique identifier. Other information that must be provided to the laboratory when requesting a test includes the sex and age or date of birth of the patient; the test(s) to be performed; the specimen source; the date and, if appropriate, the time of specimen collection. Sterile swabs for upper respiratory specimen collection may be packaged in one of two ways: When individually wrapped swabs are not available, bulk-packaged swabs may be used for specimen collection; however, care must be exercised to avoid SARS-CoV-2 contamination of any of the swabs in the bulk-packaged container. Store respiratory specimens at 2-8°C for up to 72 hours after collection. If a delay in testing or shipping is expected, store specimens at -70°C or below. Store extracted nucleic acid samples at -70°C or lower. Pack and ship suspected and confirmed SARS-CoV-2 patient specimens, cultures, or isolates as UN 3373 Biological Substance, Category B, in accordance with the current edition of the International Air Transport Association (IATA) Dangerous Goods Regulations and U.S. Department of Transportation's (DOT) Transporting Infectious Substances Safely. Personnel must be trained to pack and ship according to the regulations and in a manner that corresponds to their function-specific responsibilities. Additional information on packing, shipping, and transporting specimens can be found at Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19). If necessary, and with advance approval, specimens may be shipped to

CDC if repeated testing results remain inconclusive or if other unusual results are obtained. Please contact CDC at respvirus@cdc.gov prior to submitting specimens to confirm. Additional information, including the specimen submission form and shipping address, can be found at Submitting Specimens to CDC. CDC recommends that each laboratory perform a risk assessment before using the pneumatic tube system to transport suspected or confirmed SARS-CoV-2 specimens. Each facility should conduct a site- and activity-specific risk assessment of the procedures performed, identifying the hazards involved in the process, the competency level of the personnel performing the methods, and the laboratory facility. An institution's biosafety professional, laboratory management, scientific/clinical, and safety staff should be involved in conducting the risk assessment process to determine the appropriate specimen transport practices to implement at the facility. Facilities should ensure that all personnel who transport specimens via pneumatic tubes are trained in safe handling practices, specimen management, and spill decontamination procedures. For additional information about performing a risk assessment, refer to the Biological Risk Assessment: General Considerations for Laboratories and the Biosafety in Microbiological and Biomedical Laboratories (BMBL) 6th Edition. Blood specimens are used for antibody (or serological) tests and, for some tests authorized by the US Food and Drug Administration that are used at the point-of-care, specimens are collected by pricking the skin with a fingerstick device. Anyone performing fingerstick procedures should review the following recommendations to ensure that they are not placing persons in their care at risk for infection. Fingerstick devices should never be used for more than one person due to risk of transmission of other bloodborne infectious diseases. These recommendations apply not only to healthcare facilities but also to any setting where fingerstick procedures are performed. Instructions for collecting a capillary blood specimen by fingerstick: For an additional visual guide, see the Steps for Collecting Finger Stick Capillary Blood Using a Microtainer®. Note: Follow manufacturer's instructions when

using another collection device. As of February 26, 2020 As of December 30, 2020 To receive email updates about COVID-19, enter your email address:

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