COVID-19 Testing for Essential Critical Infrastructure Workers

April 28, 2020

The Kentucky Department for Public Health (KDPH) has expressed strong concerns over testing asymptomatic individuals. Various factors should be considered when a critical infrastructure facility plans to test asymptomatic individuals. One-time testing of asymptomatic individuals should proceed with caution. While testing availability is expanding, critical infrastructure facilities should maintain healthy at work safety practices and take any additional precautions recommended by the Centers for Disease Control (CDC) to protect their workforce and the community.

Please see the attached priority categories for testing from KDPH. Priority category 3 applies specifically to essential critical infrastructure workers.

Note: Testing priority categories may vary based on the testing locations. Some testing locations may be open to all individuals regardless of symptoms.

Testing Guidance

1. Essential critical infrastructure workers who are in need of testing should first seek testing via the publicly available testing locations. A list of those can be found here, https://chfs.ky.gov/agencies/dph/Pages/COVID-19-Drive-Thru-Locations.aspx

2. Essential critical infrastructure workers can access testing through the KDPH Gravity Laboratory testing program if they are (1) symptomatic and (2) were unable to access testing via the drive-through testing locations.
    a. There are 47 participating hospitals and local health departments in KDPH/Gravity testing project. Any one of these facilities can test symptomatic critical infrastructure workers under the new guidance as Priority 3. See attached list of Gravity Lab Locations
    b. This testing is prioritized for only those individuals that if positive could compromise the reliable provision of energy resources or public works that sustain life throughout the Commonwealth.

3. If an essential critical infrastructure worker cannot access testing via public test locations or Gravity Lab locations, the critical infrastructure facility's designated healthcare representative should request testing through the State Emergency Operations Center and the Kentucky Department of Public Health (KPDH). Submit the Testing Request Form and staff from Emergency Support function 3 (Robert Francis) or 12 (Kenya Stump). The ESF will review and coordinate a response.

Critical Infrastructure Facility Acquired Private Testing Via Commercial Laboratory

Any facility that secures private commercial laboratory testing, should ensure that the commercial laboratory complies with KDPH regulations on reporting testing results.

See the March 6, 2020 letter regarding commercial laboratory COVI-19 testing. KDPH also has a laboratory portal established for electronic reporting. Commercial laboratories should contact Doug Eades for electronic reporting of COVID-19 testing results.

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TEAM KENTUCKY

What Laboratories and Manufacturers are Offering Tests for COVID-19? U.S Food and Drug Administration FAQ and Listing for Coronavirus COVID-19 Diagnostic Tests

Sequestration Planning

Prior to sequestration, critical infrastructure facilities are encouraged to discuss any testing and\or sequestration plans with ESF-12. ESF-12 can route those plans to the state epidemiologist and KDPH for review and comment. Various factors should be considered when planning to test asymptomatic individuals prior to and during sequestration. One-time testing of asymptomatic individuals should proceed with caution.

CDC Guidance for Critical Infrastructure Workers

CDC advises that critical infrastructure workers may be permitted to continue work following potential exposure to COVID-19, provided they remain asymptomatic and additional precautions are implemented to protect them and the community.
See Guidelines on Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19

Resources

Guidance on Essential Critical Infrastructure Workforce
https://www.cisa.gov/identifying-critical-infrastructure-during-covid-19

CISA Critical Infrastructure Operations Center and Control Room Guidance 4/23

FEMA Addressing PPE Needs in Non-Healthcare Setting 4/22

COVID-19 Energy Sector Response Efforts and Frequently Asked Questions

https://www.energy.gov/sites/prod/files/2020/04/f74/COVID-19%20Energy%20FAQs_PUBLIC_TLPGreen_22April2020_Final.pdf

Contact Information

ESF-3 (Public Works): Robert Francis, robert.francis@ky.gov

ESF-12 (Energy): Kenya Stump, kenya.stump@ky.gov

Gravity Lab Testing Project Locations

1. Baptist Health Corbin
2. Baptist Health LaGrange
3. Baptist Health Madisonville
4. Baptist Health Paducah
5. Baptist Health Richmond
6. Bracken County Health Department
7. Buffalo Trace District Health Department
8. Caldwell Medical Center
9. Carroll County Memorial Hospital
10. Christian Country Health Department
11. Cumberland County Hospital
12. Cumberland Family Medical Center
13. CTK Health & Wellness Center (CareHere)
14. Ephraim McDowell Regional Medical Center
15. Flaget Memorial Hospital
16. Frankfort Regional Medical Center
17. Franklin County Health Department
18. Gateway District Health Department
19. Hardin Memorial Hospital
20. Hazard ARH Regional Medical Center
21. Highlands ARH Regional Medical Center
22. Jessamine County Health Department
23. Knox County Health Department
24. Lake Cumberland Regional Hospital (Russell County Hospital)
25. Lexington-Fayette County Health Department
26. Logan Memorial Hospital
27. Meadowview Regional Medical Center
28. Med Center Health (The Medical Center of Bowling Green)
29. Mercy Health Lourdes
30. Monroe County Medical Center
31. Montgomery County Health Department
32. Morgan CO ARH
33. Murray-Calloway County Hospital
34. Northern Kentucky Health Department
35. North Central District Health Department
36. Norton Healthcare
37. Norton Respiratory Infection Center
38. Ohio County HealthCare
39. Pikeville Medical Center
40. Saint Joseph London
41. Saint Joseph Mount Sterling
42. St. Claire Healthcare
43. Taylor Regional Hospital
44. Three River District Health Department
45. TJ Samson Regional Health
46. Triad Health Systems, Inc.
47. Twin Lakes Regional Medical Center

Priorities for Testing Persons with Suspected COVID-19 Infection

The following is taken directly from CDC guidance (https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html) with selected changes/additions shown in underlined text.

Clinicians should use their professional judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested. Most patients with confirmed COVID-19 have developed fever[1] and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing) or other symptoms (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html).

Other considerations that may guide testing are epidemiologic factors such as the occurrence of local community transmission of COVID-19 infections in a jurisdiction. Clinicians are strongly encouraged to test for other causes of respiratory illness. Priorities for testing include:

PRIORITY 1
Ensure optimal care options for all hospitalized patients, lessen the risk of nosocomial infections, and maintain the integrity of the healthcare system
- Hospitalized patients
- Symptomatic healthcare workers

PRIORITY 2
Ensure that those who are at highest risk of complication of infection are rapidly identified and appropriately triaged
- Patients in long-term care facilities with symptoms
- Patients 60 years of age and older with symptoms
- Patients with underlying high-risk[‡] conditions with symptoms
- First responders with symptoms

PRIORITY 3
As resources allow, test individuals in the surrounding community of rapidly increasing hospital cases to decrease community spread, and ensure health of essential workers
- Critical infrastructure workers with symptoms**†**
- Individuals who do not meet any of the above categories with symptoms
- Asymptomatic health care workers and first responders*
- Asymptomatic persons working or residing in congregate care (e.g. long-term care, assisted living, etc.) or correctional facilities who may have been exposed to coronavirus.*
- Individuals with mild symptoms in communities experiencing high COVID-19 hospitalizations

NON-PRIORITY
- Individuals without symptoms

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Footnotes:

‡[CDC Information for Healthcare Professionals: COVID-19 and Underlying Conditions, High-Risk Conditions](#)

†[Guidance on the Essential Critical Infrastructure Workforce: Ensuring Community and National Resilience in COVID-19 Response. Version 2.0 (March 28, 2020)](#)

* CDC and FDA recommend collecting nasopharyngeal specimens for COVID-19 diagnosis in persons who are symptomatic or asymptomatic. However, in the absence of nasopharyngeal swabs, the shorter nasal swabs can be utilized for nasal (anterior nares) and nasal midturbinate samples but such samples are only recommended if the person being tested has active symptoms of COVID-19. See page 3**.**

1Fever may be subjective or confirmed

2For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation. Because of their often extensive and close contact with vulnerable patients in healthcare settings, even mild signs and symptoms (e.g., sore throat) of COVID-19 should be evaluated among potentially exposed healthcare personnel. Additional information is available in CDC's [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19)](#).

3Close contact is defined as—
   a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case **– or –**
   b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on). If such contact occurs while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to healthcare personnel exposed in healthcare settings as described in CDC's [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with COVID-19](#).

For initial diagnostic testing for COVID-19, CDC recommends collecting and testing upper respiratory tract specimens (nasopharyngeal swab). CDC also recommends testing lower respiratory tract specimens, if available. For patients who develop a productive cough, sputum should be collected and tested for COVID-19. The induction of sputum is not recommended. For patients for whom it is clinically indicated (e.g., those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage sample should be collected and tested as a lower respiratory tract specimen. Specimens should be collected as soon as possible once a PUI is identified, regardless of the time of symptom onset. See [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens](#) from Patients Under Investigation (PUIs) for COVID-19 and [Biosafety FAQs](#) for handling and processing specimens from suspected cases and PUIs.

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FDA and CDC Guidance on COVID-19 Specimen Collection

FDA Coronavirus (COVID-19) Update: Daily Roundup
https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundup

The FDA also updated its FAQs on Diagnostic Testing for SARS-CoV-2 regarding specimen collection for COVID-19 testing. Based on available data, FDA believes that, for symptomatic patients, nasal swabs could be used that access just the front of the nose rather than the depth of the nasal cavity. This would provide COVID-19 that is more comfortable for patients, allows self-collection of specimens at collection sites, and that can be performed with a simpler and more readily available swab.

CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)
https://www.cdc.gov/coronavirus/2019-ncov/lab/guidelines-clinical-specimens.html

Specimen Type and Priority

All testing for SARS-CoV-2 should be conducted in consultation with a healthcare provider. Nasopharyngeal (NP) swabs can be used for testing asymptomatic persons in a healthcare setting, including long-term care facilities. At this time anterior nares and mid-turbinate specimen collection are only appropriate for symptomatic patients and both nares should be swabbed. The guidance below addresses options for collection of specimens once a clinical determination has been made to pursue SARS-CoV-2 testing.
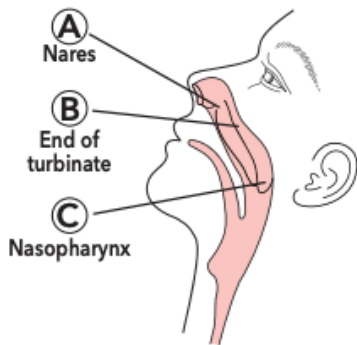
For initial diagnostic testing for SARS-CoV-2, CDC recommends collecting and testing an upper respiratory specimen. Nasopharyngeal specimen is the preferred choice for swab-based SARS-CoV-2 testing. When collection of a nasopharyngeal swab is not possible, the following are acceptable alternatives:

- An oropharyngeal (OP) specimen collected by a healthcare professional, or
- A nasal mid-turbinate (NMT) swab collected by a healthcare professional or by onsite self-collection (using a flocked tapered swab), or
- An anterior nares (nasal swab; NS) specimen collected by a healthcare professional or by onsite self-collection (using a flocked or spun polyester swab)
- Nasopharyngeal wash/aspirate or nasal aspirate (NA) specimen collected by a healthcare professional
  For NS, a single polyester swab with a plastic shaft should be used to sample both nares. NS or NMT swabs should be placed in a transport tube containing either viral transport medium, Amies transport medium, or sterile saline.

https://www.gravitydiagnostics.com/kentucky-hospitals/

CDC and FDA recommend collecting nasopharyngeal specimens for COVID-19 diagnosis in persons who are symptomatic or asymptomatic. Nasal swabs and mid-turbinate swabs are considered acceptable specimen types for use with the Gravity Diagnostics COVID-19 assay but performance with these specimen types has not been established. Testing of nasal and mid-turbinate nasal swabs (self-collected under supervision of or collected by a healthcare provider) **is limited to a patient with symptoms of COVID-19**. Please refer to FDA's FAQs on Diagnostic Testing for SARS-CoV-2 for additional information. https://www.fda.gov/medical-devices/emergency-situations-medical-devices/faqs-diagnostic-testing-sars-cov-2


(A) Nares
(B) End of turbinate
(C) Nasopharynx

In each case, collect samples by standard clinical methods.

Tip the patient's head back and check to see which nostril has more mucus (head should be inclined from vertical as shown for proper specimen collection). It is important to obtain as much secretion as possible.

NASAL SWAB

1. Gently insert the sterile swab until resistance is met at the level of the turbinates (less than one inch into the nostril).
2. Rotate the swab a few times against the nasal wall and remove from nostril.
3. Sample should be tested as soon as possible.
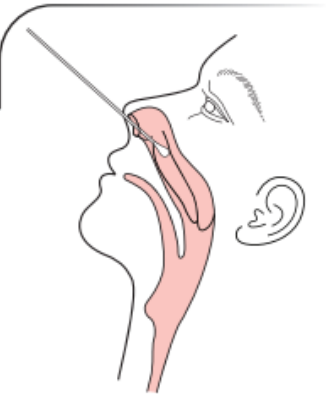
NASOPHARYNGEAL SWAB

1. Gently insert the sterile swab.
2. Keep the swab near the septum floor of the nose while gently pushing the swab into the posterior nasopharynx.
3. Rotate the swab several times and remove from nostril.
4. Sample should be tested as soon as possible.
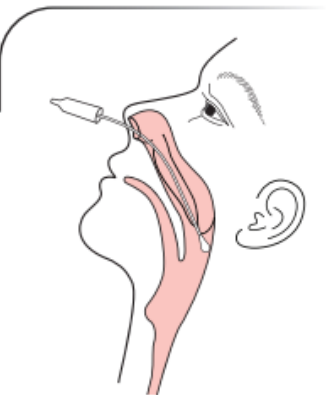
For guidance on taking a nasopharyngeal specimen, see "NETEC: COVID-19 Laboratory Specimen Collection: Nasopharyngeal Swab " https://www.youtube.com/watch?v=osl9W-O0O5g

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