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Coronavirus (COVID-19): what you need to do

Stay at home

- Only go outside for food, health reasons or work (but only if you cannot work from home)
- If you go out, stay 2 metres (6ft) away from other people at all times
- Wash your hands as soon as you get home

Do not meet others, even friends or family.

You can spread the virus even if you don't have symptoms.

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Public Health
England

Guidance

COVID-19: laboratory investigations and sample requirements for diagnosis

Updated 3 April 2020

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1. Scope

This document describes the samples required for establishing a diagnosis of COVID-19 acute respiratory disease and the tests that will be performed in England.

2. Initial steps and arranging testing for COVID-19

See the [criteria for testing](#). If a patient meets the criteria for COVID-19 acute respiratory disease testing, please refer to [how to arrange laboratory testing](#). There is no need to call the health protection team (HPT) or regional laboratory to request testing.

More information is provided in the specific guidance on [safe sampling and handling of laboratory samples](#) and [infection prevention and control](#).

Designated Public Health England (PHE) regional laboratories, in addition to the Respiratory Virus Unit (RVU) Reference Laboratory at PHE Colindale, are able to carry out testing for COVID-19. See [list of laboratories with this capability](#).

Samples that are positive on initial testing by the regional laboratory will be considered as presumptive positives and will be referred to PHE Colindale for confirmatory testing. Presumptive positive results will be telephoned and contact tracing should commence immediately.

Please note that patients who are admitted to hospital will need additional respiratory samples taken for testing for other respiratory pathogens, such as influenza, in addition to those detailed below for COVID-19. These additional tests must be carried out by the referring laboratory – samples must not be forwarded to the designated PHE regional laboratory who will be carrying out the 2019-nCoV screening test.

If testing for avian influenza is also indicated (based on assessment of travel and exposure histories), specific and separate samples will need to be collected and sent to the appropriate public health laboratory as per routine practice. For more information, refer to [PHE Avian influenza: guidance, data and analysis](#)

If testing for MERS-CoV is also indicated (based on assessment of travel and exposure histories), specific and separate samples will need to be collected and sent to the [relevant public health laboratory](#).

3. Explanation of sample sets

3.1 Samples required for initial diagnostic testing (possible case)

1. Upper respiratory tract sample(s): single swab used for throat then nose into one pot of viral transport medium; a viral nose swab and a viral throat swab combined into one pot of viral transport medium, or a nasopharyngeal aspirate in a universal transport pot. Bacterial or charcoal swabs are not suitable.
2. Lower respiratory tract sample (sputum) if obtainable, in universal container

Additionally, if the patient is admitted to hospital, take a sample for acute serology.

- 5mL serum tube or plain (no additive) tube; for children <12 years, 1mL is acceptable

Important points about sample-labelling and request forms include:

- label each sample with ID, date of birth and type of sample
- use the specific [form for requesting COVID-19 acute respiratory disease testing \(E28\)](#), one form for each sample
- do not place paperwork (request forms) in the primary container for Category B transport
- request form must include a contact phone number for sharing of results
- samples without appropriate paperwork will not be tested or testing will be delayed

3.2 Samples required for monitoring confirmed 2019-nCoV acute respiratory disease

Sequential sampling may be required to monitor the progress of confirmed COVID-19 acute respiratory disease, decided on a case-by-case basis. The Reference Laboratory at PHE Colindale (RVU) will advise the referring laboratory about the frequency of sampling and which sample types need to be collected on particular days.

4. Sending samples to the testing laboratory

The referring laboratory must send the sample to the designated laboratory listed in [how to arrange laboratory testing](#). There is no need to call the HPT or regional laboratory to request testing.

All samples for COVID-19 testing should be packaged and transported in accordance with Category B transportation regulations and labelled 'Priority 10'. [UN 3373 packaging](#) must be used for sample transport.

Further guidance is given on packaging and transport of samples in [safe handling and processing for laboratories](#). PHE follows the [World Health Organization \(WHO\) guidance on regulations for the transport of infectious substances 2019-](#)

[2020.](#)

If the referring laboratory needs to know whether the samples have arrived at the designated laboratory, they should contact the courier for tracking information.

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