



COVID-19: Frequently Asked Questions: asymptomatic infection, reinfection, immunity, and GP management of patients with COVID-19 test results from a laboratory other than the public laboratory service.

V1.8 01.04.2021

Evidence base:

These FAQs are based on HIQA evidence syntheses, public health and clinical evidence summaries which have informed the HIQA-Expert Advisory Group (EAG) available at https://www.hiqa.ie/areas-we-work/health-technology-assessment/covid-19-publications. They also include advice and decisions of the former COVID-19 EAG (Jan-Sept 2020) and the HSE Antigen Detection Testing (ADT) group.

Note 1: this guidance is interim and is updated as the situation changes and new evidence emerges. It is also important that risk assessments and clinical judgement are employed.

Note 2: This guidance does not apply to variants of concern (VOC). See here for VOC guidance.

Version	Date	Change from previous version
V1.8	01/04/2021	Clarification that this guidance does not apply to variants of concern
V1.7	05.03.2021	The period of presumptive immunity post infection has been extended to 6 months. This alters advice related to management of contacts, re-testing within mass testing programmes, and testing prior to hospital admission, scheduled procedures or transfer to an RCF or LTCF.
V1.6	24.02.2021	 A new section has been added to guide the interpretation of a positive antigen test in a previously infected person, or a positive antigen test in the context of a not detected PCR result.
V1.5	10.02.2021	Change in timing of testing of close contacts to day 0 and day 10, with ending of period of restricted movements if "not detected" result from day 10 test and remain asymptomatic
V1.4	23/12/2020	Question and response to "Do recovered cases that travel from overseas still have to restrict their movements for 14 days after they enter Ireland?" has been updated
V1.3	18/12/2020	Includes advice for GPs on how to respond to a patient presenting with COVID-19 test results from a laboratory other than a public service laboratory
V1.2	4/12/2020	Question and response to "Do recovered cases that travel from overseas still have to restrict their movements for 14 days after they enter Ireland?" removed temporarily, as it needs to be amended in light of Gov.ie advice on travel
V.1.1	30.11.2020	What is the period of infectiousness paragraph changed to what is the period of isolation. Error in duration of isolation for asymptomatic cases corrected

This document is intended for GPs, clinicians, public health doctors and healthcare workers, and aims to provide answers to common questions relating to duration of immunity, reinfection, indications for testing, interpretation of certain test results, and other restrictions. Please note, when referring to testing, this guidance applies to testing using the real-time reverse transcription polymerase chain reaction (rRT-PCR) test, unless otherwise stated.

Asymptomatic and pre-symptomatic cases

What is the difference between a pre-symptomatic case of COVID-19, and an asymptomatic case of COVID-19?

A pre-symptomatic case of COVID-19 is a person who has no symptoms at the time of testing but who subsequently develops symptoms consistent with COVID-19. An asymptomatic case is a person who tests positive for SARS-CoV-2 and never develops symptoms of COVID-19.

At times, people are classified incorrectly as asymptomatic or pre-symptomatic when they may in fact have had atypical symptoms such as fatigue or muscle pains which had not been identified at the initial consultation. In addition, older patients may present with lethargy, confusion, loss of appetite, or unexplained change in baseline condition, rather than with typical symptoms.

From what date are asymptomatic cases classified as cases?

Asymptomatic cases are defined as cases from the date when the test was taken. Their management in terms of self-isolation and contact tracing is the same as that for symptomatic cases.

When does contact tracing begin for an asymptomatic case?

For the purpose of contact tracing of asymptomatic cases, the infectious period starts 24 hours before the date of the SARS-CoV-2 test (https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/contacttracingguidance/

What restrictions apply if an asymptomatic person tests positive and then develops symptoms within the next 10 days?

The person is now considered to have been pre-symptomatic at the time of testing. The person should self-isolate from the date of onset of symptoms: the duration of self-isolation is 10 days for those in the community, and 14 days for long term care facility (LTCF) and residential facility (RF) residents or hospitalised cases; for all cases the last 5 days of self-isolation must be fever-free.

What is the period of isolation?

Isolation is required for 10 days from onset of symptoms for a community case, the last 5 of which must be fever-free, and 14 days for a hospitalised case or a case in a resident of a residential facility (RF) or long-term care facility (LTCF), the last 5 of which must be fever-free. If the case is asymptomatic, isolation is required for 10 days from the date of the SARS-CoV-2 test.

People who tested positive for SARS-CoV-2 in the past may continue to test 'positive' for SARS-CoV-2 for many weeks or months after initially testing positive. This does not mean that they are infectious. This can be considered to be persistent detection of non-viable virus material rather than re-infection, and no other actions are generally required.

Recovered cases: immunity and testing

If a person has confirmed SARS-CoV-2 infection, subsequently recovers, and is later identified as a contact of a case, could this person be considered immune and therefore not at risk of re-infection?

This depends on the duration of the time between the original confirmed infection and the current exposure as a contact, and whether or not they are currently symptomatic.

People are considered to have immunity for 6 months after their initial positive SARS-CoV-2 PCR test. A person who is <u>now</u> an **asymptomatic contact** of a case and has had a positive test result within the previous 6 months does <u>not</u> need to restrict their movements and does not require testing. **Please note: this advice does not apply if the contact is with a suspected or confirmed variant of concern (VOC) case – see <u>guidance for VOCs</u>.**

If the previous positive test result in an asymptomatic contact was more than 6 months previously, then they should_be referred for day 0 (Test 1) and day 10 (Test 2) testing. They must restrict their movements pending the outcome of testing. They may end the period of restricted movements on receipt of a "not detected" test result from the Day 10 test, so long as they remain asymptomatic. In the absence of a Day 10 test, they must restrict their movements for 14 days.

However, given uncertainty around the development of protective immunity, all contacts in these situations should monitor for symptoms, and if they become unwell they should self-isolate and be tested for SARS-CoV-2 and other respiratory viruses.

What is the advice for someone who had a previous infection with COVID-19, who has fully recovered and subsequently develops symptoms consistent with COVID-19?

This should be managed as a contagious viral infection (SARS-CoV-2 or another respiratory virus infection) with appropriate IPC precautions. It is important to:

- Establish the diagnosis by doing an extensive viral infection screen (a respiratory virus panel)
- If a positive SARS-CoV-2 result is obtained, seek virology/microbiology input on the
 interpretation of all results, including SARS-CoV-2 cycle threshold (Ct) values, to
 determine if this is a new infection or detection of a small amount of persistent, nonviable virus material.

Note: Tests have limitations and need to be considered in the context of the clinical picture. If an alternative diagnosis does not explain the clinical presentation, suspected cases of reinfection should be reported to public health.

If re-infection cannot be excluded, then it cannot be assumed that the case is not infectious. Current contact tracing guidelines will apply.

What is the advice for those (including healthcare workers) with a history of COVID-19 infection who have recovered completely and remain well but are tested again e.g. during a mass testing programme, and who have positive SARS-CoV-2 test results?

A person with a previous positive SARS-CoV-2 test who is currently clinically well should not be re-tested for 6 months following onset of illness. They should not be included in serial testing programmes in the 6 months following onset of illness. After 6 months they can reenter serial testing programmes. If a person with a previous positive test for SARS-CoV-2, is currently clinically well, is tested within 6 months, and receives a positive test result, this can be considered to be persistent detection of non-viable virus material rather than re-infection, and no other actions are required.

If they develop symptoms, this should trigger further review including testing for SARS-CoV-2 and other respiratory viruses. Interpretation of the Ct values of the PCR test for SARS-CoV-2

should be performed in conjunction with a microbiologist or virologist, as re-infection may need to be considered.

If an asymptomatic person with a history of a positive test more than 6 months ago has a positive test as part of a serial testing programme, then interpretation of the Ct values of the PCR test for SARS-CoV-2 should be performed in conjunction with a microbiologist or virologist, as re-infection may need to be considered. Please see here for further information on interpretation of weak positive (high Ct value) PCR results. If Ct values are not available, then proceed on the basis that a positive test is evidence that a person is infectious.

What is the advice for those with a history of COVID-19 infection who have recovered completely and remain well but are tested again in advance of hospital admission, scheduled procedures and transfer to Residential Facilities (RF) or Long-Term Care Facilities (LTCF) and who have positive SARS-CoV-2 test results?

A person with a previous positive SARS-CoV-2 test who is currently clinically well should not be re-tested for 6 months following onset of illness prior to hospital admission, scheduled procedures or transfer to the RF or LTCF.

If a person with a previous positive test for SARS-CoV-2, is currently clinically well, is tested within 6 months, and receives a positive test result, this can be considered to be persistent detection of non-viable virus material rather than re-infection, and no other actions are required.

If they develop symptoms, this should trigger further review including testing for SARS-CoV-2 and other respiratory viruses. Interpretation of the Ct values of the PCR test for SARS-CoV-2 should be performed in conjunction with a microbiologist or virologist, as re-infection may need to be considered.

If an asymptomatic person with a history of a positive test more than 6 months ago has a positive test, then interpretation of the Ct values of the PCR test for SARS-CoV-2 should be performed in conjunction with a microbiologist or virologist, as re-infection may need to be considered. Please see here for further information on interpretation of weak positive (high Ct value) PCR results. If Ct values are not available, then proceed on the basis that a positive test is evidence that a person is infectious.

Antigen test results

How should a positive antigen test result, obtained using a test that has been validated as part of the HSE testing programme, be interpreted in an asymptomatic person who was previously positive (either by antigen or PCR)?

Re-testing of an asymptomatic person with a history of confirmed infection (by antigen or PCR) is not advised within 6 months.

It is considered that the mean duration of antigen positivity is 4-5 days, though this could be longer in immunocompromised people.

If a positive antigen test result, using a test that has been validated as part of the HSE testing programme, is obtained in an asymptomatic person who was previously positive, then the interpretation of the result depends on the timing of the antigen test in relation to the previous diagnosis.

If a person tests positive on an antigen test within 2 weeks of a previous positive test result (by antigen or PCR), then this is considered part of the same infection. They do not need to self-isolate and contact tracing is not required.

A positive result on an antigen test performed more than 2 weeks following a previously positive test result (by antigen or PCR) should be considered a new infection. The person should self-isolate and contact tracing should be carried out. Their contacts should be referred for day 0 (Test 1) and day 10 (Test 2) testing and must restrict their movements pending the outcome of testing. They may end the period of restricted movements on receipt of a "not detected" test result from the Day 10 test, so long as they remain asymptomatic. In the absence of a Day 10 test, they must restrict their movements for 14 days.

How should a positive antigen test result, obtained using a test that has been validated as part of the HSE testing programme, be interpreted in a symptomatic person who was previously positive (either by antigen or PCR)?

A positive antigen test in a person with symptoms consistent with a new onset of COVID-19 should generally be considered as reflecting a new infection and regarded as infectious in the first instance. A full clinical evaluation is required in each case.

What is the advice where a person tests positive by antigen test and virus is not detected by PCR test?

If the antigen and PCR tests were taken at the same time, the PCR result should generally be taken as the correct result. However, clinical governance and interpretation of these results rest with the clinician responsible for overseeing the antigen testing, who may wish to organise repeat PCR testing. In cases of uncertainty, the default is to manage the person as a positive case until testing and assessment have been completed. For other situations, review on a case-by-case basis is required, which will include the circumstances in which the test was undertaken, such as in a family setting or in a complex workplace setting. Consultation with the Department of Public Health will be needed, and they will provide further advice on this. It is noted that, given its high specificity, a positive antigen test using a test that has been validated as part of the HSE testing programme is generally an indication that this is an infectious case. If the antigen test was carried out outside the public health system, then it is advised to repeat a PCR test in the public system and follow advice as set out here.

Movement Restrictions

What restrictions apply for household contacts where a case cannot self-isolate from their household?

For adult and child cases for whom it is not feasible to self-isolate (e.g. children under 13 years old or adults with care needs), all household contacts with ongoing unprotected exposure to the case should restrict their movements for 17 days from the onset of symptoms in the case or from the date of the test if the case was asymptomatic.

What happens if members of the same household become positive over time?

The period of restricted movements (up to receipt of a "not detected" test result from a Day 10 test, or 14 days in the absence of a Day 10 test) from the time of last contact with a positive case applies to the household contacts of each person that becomes positive. Hygiene measures within the household should be emphasised. If possible, household contacts of a case should consider physically distancing from each other in order to reduce their risk of exposure, in case one of them becomes infectious.

When an index case (the first positive case) and any other household members who become positive have completed their 10-day self-isolation period they are then exempt for 6 months (from the date of onset of symptoms) from having to restrict their movements, if any other household contacts become positive subsequently.

Do recovered cases that travel from overseas still have to restrict their movements after they enter Ireland?

Yes. On 5th February 2021 new Regulations (S.I. No. 44 of 2021) came into effect. They place obligations on passengers arriving into Ireland who have travelled from overseas. Travellers are required to provide evidence that they have been tested for COVID-19 (using RT-PCR within 72 hours before their arrival). They are required to self-quarantine for 14 days, and testing is advised at day 0 and day 10. If they have travelled from South Africa, Brazil or any other Category 2 country in the period of 14 days prior their arrival in Ireland, this period of time cannot not shortened if the test results are "not detected". For travellers coming in from other countries, this time period of quarantine can be shortened, if they have a test at day 5 and the result is "not detected". Having a history of confirmed COVID-19 abroad, or prior COVID-19 vaccination do not exempt persons from these obligations.

Residential Facilities (RF), Long Term Care Facilities (LTCF) and Hospitalised Cases

What is the general advice regarding confirmatory testing and discharge plans for a hospitalised patient who has recovered from COVID-19?

For those individuals with COVID-19 who have made a complete clinical recovery from their illness, are at least 14 days from symptom onset, and who have had no fever for 5 days, there is no requirement for repeat testing, to demonstrate that RNA is not detected, before discharge from hospital.

When can immunocompromised individuals with COVID-19 be moved out of isolation in a LTCF, RF or a hospital?

Immunocompromised individuals who are in hospital, in a LTCF, or a RF can be moved out of isolation 14 days from onset of symptoms (or from date of swab if asymptomatic), provided they have made a complete clinical recovery, and have had no fever for 5 days*

*There are certain situations where testing to ensure viral clearance after 14 days may be useful, and clinical discretion may be used to determine when a "SARS CoV-2 RNA Not Detected" result for a particular patient may be helpful. For example, in patients with subtle or atypical symptoms (in particular older patients), those who might not mount a fever (immunocompromised patients), or those who might not be able to communicate effectively (patients with dementia), repeat testing may be of use. If repeat testing is performed, in general, high or increasing Ct¹ values in the absence of clinical symptoms, are unlikely to indicate infectiousness.

Advice for Healthcare Workers (HCW)

Note: there is no requirement for pre-employment testing of well healthcare workers for SARS-CoV-2.

What is the advice for HCWs with a history of COVID-19 infection who have finished selfisolation prior to the commencement of staff screening in residential care facilities?

HCWs who test positive for the first time for SARS-CoV-2 must self-isolate for 10 days from onset of symptoms if symptomatic and from the date the swab was taken if asymptomatic. They should not be retested for SARS-CoV-2 as part of screening within 6 months of the onset of illness.

However, at any stage if the HCW develops symptoms this should trigger further review including testing for SARS-CoV-2 and other respiratory viruses. Interpretation of the Ct values of the PCR test for SARS-CoV-2 should be performed in conjunction with a microbiologist or virologist, to assist in making a judgement on the likelihood of this being a re-infection.

What restrictions apply if an asymptomatic or pre-symptomatic healthcare worker tests positive for SARS-CoV-2 for the first time?

¹ Lower cycle threshold (ct) values indicate higher viral loads

The asymptomatic HCW must remain off work for 10 days from the date of the test and the infectious period for contact tracing starts 24 hours before the date of the test.

If a HCW is asymptomatic and tests positive but then subsequently gives a history of previous symptoms consistent with COVID-19:

- 1. If they report symptoms consistent with COVID-19 within 14 days prior to the test they must remain off work and self-isolate for 10 days from the date symptoms commenced.
- 2. If they report symptoms consistent with COVID-19 greater than 14 days prior to the test they must remain off work and self-isolate for 10 days from the date of the test.

What is the advice for a healthcare worker returning to work in a Residential Facility (RF) or Long Term Care Facility (LTCF) who was hospitalised for a condition not related to COVID-19?

If this healthcare worker was not a close contact of any case of COVID-19 in hospital or elsewhere, then no restrictions apply. They can return to work in the RF or LTCF and no testing is required.

What is the advice to a GP when a patient presents with a report of a test result for COVID-19 from a laboratory other than a public service laboratory

General Practitioners are not in a position to assess the quality of the laboratory service provided by a service provider. The following approach is recommended for a GP dealing with the situation when a patient presents with a COVID-19 test result from a laboratory other than a public service laboratory.

The GP should request the patient to provide a record of the result either as a printed report, email or text message and make a note of this result, the date of the test and the name of the service provider in the patient's record.

If the test was an antibody test, the patient should be advised that no particular measures are recommended based on this result.

If the test was a test for virus (sample taken from the nose, mouth or throat), the GP should:

advise the person to have a repeat test performed through a public service provider.

- advise the patient to follow guidance on self-isolation as for a positive case.
- advise the patient that all members of the person's household should follow <u>guidance</u>
 <u>for household contacts</u> of a confirmed positive case.
- Notify the case to public health if it meets the case definition.

If the person reports a negative or not detected test result, the GP should also request a record of the result. If the patient has symptoms of COVID-19, the GP should:

- advise the person to have a repeat test performed through a public service provider.
- advise the patient to follow guidance on self-isolation as for a positive case.
- advise the patient that all members of the person's household should follow <u>guidance</u>
 <u>for household contacts</u> of a confirmed positive case.
- Notify the case to public health if it meets the case definition.

For more details, please see <u>Primary Care Guidance - Health Protection Surveillance Centre</u>