



Guidelines for Healthcare Workers (HCWs) with Exposure to Confirmed Cases of COVID-19 (Last Updated March 3, 2022)

Due to the ongoing COVID-19 pandemic, some healthcare workers (HCWs) have been found to have exposure to the disease and those who have had infection following exposure to the virus or history of high-risk contact will need to undergo a quarantine, resulting in the shortage of frontline healthcare workers (HCWs). It is therefore important to develop and implement the guidance to ensure safety of **HCWs and minimize a negative impact on and potential disruption to healthcare system.**

Currently most healthcare workers (HCWs) have received vaccination against COVID-19, with some being fully vaccinated while other partially vaccinated and are scheduled to receive the second dose later. Full vaccination coverage for healthcare workers (HCWs) will play a key role in significantly reducing the need for HCWs to undergo quarantine. Nevertheless, vaccination does not provide full protection against the virus but helps reduce severity of the disease if they become infected.

[Summary of important changes made to the updated guidelines for healthcare workers \(HCWs\) with exposure to confirmed cases of COVID-19 dated March 3, 2022](#) are as follows:

- 1) Definition of vaccinated healthcare workers (HCWs)
- 2) Guidelines for healthcare workers (HCWs) who are considered high-risk contacts and those who are determined to be low-risk contacts

Definitions for healthcare workers (HCWs) only

A contact is defined as a HCW involved in the activities with a confirmed or probable case(s) of COVID-19. This is divided into two different groups as follows:

1. Contact who has had history of exposure to COVID-19 patient(s) outside healthcare setting, e.g. in community or with family members within the past 10 days prior to illness onset;
2. Contact who may have contracted the virus from patient(s). This means the individual who was exposed to the patient 2-3 prior to illness onset until throughout isolation period of the patient. **Close contacts include:**
 - 2.1 Person who stayed close to or had conversation with COVID-19 patient(s) for >5 minutes, or was exposed to the patient's cough or sneeze;
 - 2.2 Individual who stayed in enclosed spaces with poor ventilation together with COVID-19 patient(s) for >30 minutes, for instance, in air-conditioned bus, commuter vane, or air-conditioned room;



Risk Assessment of Close Contacts

High-risk contact is defined as a person who is likely to contract the virus through contact with the patient's respiratory secretions according to the definition in 2.1 **while not wearing appropriate personal protective equipment (PPE)**, i.e. according to the Guidance for Appropriate Use of Personal Protective Equipment (PPE) developed by Department of Medical Services (DMS) in collaboration of the Working Group on Medical Care of Ministry of Public Health (MOPH), local medical schools and relevant healthcare professional associations (version date: April 20, 2020), or according to the definition in 2.2.

Low-risk contact is defined as an individual who is less likely to contract the virus from or transmit the virus to the patient, e.g. any close contacts who do not meet the definition of high-risk close contact.

Note: These definitions may be adjusted to suit the local context of a particular healthcare setting.

Healthcare Workers (HCWs) without Exposure Risk

These HCWs include:

1. HCWs caring for patients and wearing appropriate PPE are not considered close contacts, **whether they are working in their own health facilities or other health facilities in support of outbreak response.**
2. HCWs who are not in close contact with patients or stay >1 meter away from patients in a well-ventilated place
3. HCWs who have no history of community exposure

Definitions of Vaccinated Healthcare Workers (HCWs)

Vaccinated HCWs who have developed a certain level of immunity against SARS-CoV-2 include:

1. **HCWs who received a booster dose 2 weeks – 3 months ago.**
Booster dose is vaccine administered after a person has been fully vaccinated with a primary series of COVID-19 vaccine and booster dose may include at least one dose of either Oxford/AstraZeneca ChAdOx1-S vaccine or mRNA vaccine (Pfizer or Moderna). **However, it is important to note that administration of the 3rd dose of Oxford/AstraZeneca ChAdOx1-S in those who have previously received a two-dose primary series of this vaccine may not be considered a booster dose.**
Primary series of COVID-19 vaccines include:
 - a) Two doses of either Sinovac, Sinopharm, Oxford/AstraZeneca ChAdOx1-S, or mRNA vaccines (Pfizer or Moderna);
 - b) Mixed vaccination of Sinovac, Sinopharm, Oxford/AstraZeneca ChAdOx1-S; or mRNA vaccine as 1st dose, followed by 2nd dose of either Oxford/AstraZeneca ChAdOx1-S or mRNA vaccine.
2. HCWs with previous infection who are fully vaccinated post infection according to the vaccination guidance of Department of Disease Control (DDC), Ministry of Public Health (MOPH).

The above criteria is applicable only for the purposes of risk assessment and determination of the need for HCWs to undergo quarantine.



Partially vaccinated healthcare workers (HCWs) is defined as other HCWs who do not meet the definitions in 1a/1b/2. **Unvaccinated healthcare workers (HCWs)** refer to other HCWs who have never received COVID-19 vaccine.

General Precautions for Prevention of Healthcare-Associated Transmission

- 1. Visitor screening point should be set up at the facility entrance.** All visitors should be asked about their history of exposure to COVID-19 and symptoms of patients seeking medical care including those accompanying them should also be collected using a self-constructed questionnaire which is easy to use and suitable for the local context of each health facility.
- 2. Necessary steps should be taken to ensure that all service points within the facility have good ventilation.**
- 3. Consider reducing the number of relatives or prohibiting relatives from visiting hospitalized patients** based on the outbreak situations.
- 4. Every effort should be made to ensure all healthcare workers (HCWs), patients, and people accompanying them wear a face mask at all times when they are at health facility and wash their hands frequently,** especially before eating, after going to the bathroom, as well as implementing patient care activities based on a 5-moment principle recommended by the World Health Organization (WHO).
- 5. Health facilities shall ensure that their staff strictly comply with the following practices.**
 - 5.1 Avoid eating together.**
 - 5.2 Avoid participating in any other activities in which participants do not wear a face mask. These recommended practices also apply to family members of HCWs.**
- 6. In the event that medical consultation and/or treatment lasts >15 minutes, consider using N-95 respirator or double face masks, i.e. wearing cloth face covering on top of face mask to ensure face mask fits the face well, or using face mask toggle or tying a knot on its earloop, or using adhesive tape to seal face mask on all sides, depending on personal preference of each health staff.**
- 7. When conducting any aerosol-generating procedures, HCWs should at least wear an N-95 respirator and consider donning a face shield as well.**
- 8. All inpatients should wear a face mask at all times, except those with tracheal intubation** and when eating, drinking, and brushing their teeth.
- 9. Conduct surveillance among healthcare workers (HCWs) and patients.** If HCWs are found to have symptoms of respiratory infection, they should be suspended from duty and receive diagnosis to determine the cause of infection as soon as possible, as well as having specimens collected for SARS-CoV-2 testing as appropriate. Surveillance by frequently testing for SARS-CoV-2 among frontline HCWs who are at an increased risk of infection, as well as outsourced contractors, will help ensure early diagnosis. This includes, for instance, conducting an ATK test every two weeks. However, the frequency of ATK tests may be adjusted based on the outbreak situations within that health facility.
- 10. As for surveillance among patient population, each health facility may consider testing for SARS-CoV-2 infection** among patients hospitalized with any causes and acute febrile illness, respiratory tract infections, including pneumonia of unknown cause. Random testing may be conducted on a weekly basis, as well as surveillance among caregivers.



11. Encourage all HCWs to receive vaccination against COVID-19, if there is no contraindication.
12. In the event any HCWs have been exposed to the disease, consider conducting risk assessment, laboratory testing for SARS-CoV-2, and requiring those affected HCWs to undergo a proper quarantine administered by designated person or organization. If there are any other details that are different from this guidance, infection prevention and control specialist should be consulted to ensure safety for HCWs. This is to ensure each health facility can continue to provide uninterrupted healthcare services to the public while minimizing potential impacts on health system.

Hospital-Based Surveillance

To detect COVID-19 infection among the following high-risk groups:

- 1) Frontline healthcare workers (HCWs)
- 2) HCWs serving as back-office staff
- 3) Patients hospitalized with other diseases or conditions
- 4) Other groups meeting the PUI definition of Department of Disease Control (DDC)
- 5) Other groups such as subcontractors, etc.

Hospital-level operational procedures

1. Actions should be taken based on evolving situations in the organization and local setting.
2. Within the past 2 weeks, if no new cases have been detected, surveillance should be conducted among health staff through routine screening for symptoms before starting work every day. In addition, each health facility may consider randomly conducting proxy ATK tests to identify infections every two weeks. During the process some members of each group will have specimen collected using a proportional-to-size approach, as well as following the precautions to minimize the risks specifically for HCWs, particularly among those staff who are required to work onsite full time.
3. As for patients in other non-COVID-19 wards, consider conducting random tests on a weekly basis. If infection is detected, initiate disease investigation and contain the outbreak according to the existing guidelines for disease control and prevention.
4. As for patients' relatives and caregivers, consider screening for COVID-19-related symptoms and may consider randomly conducting ATK tests as appropriate on a weekly basis.



In the event HCWs are high-risk close contacts, HCWs who have been fully vaccinated and boosted

Health facility must follow the guidelines in Figure 1 as follows:

1. **Three (3) samples** will be collected for SARS-CoV-2 testing by ATK or RT-PCR on **D0, D5, D10** following exposure to a confirmed case of COVID-19.
2. **HCWs may continue to work as usual while strictly complying with DMHTT precautions.** They must wear a face mask at all times while staying with others and they should not eat with others. In addition, they should also consider avoiding work that requires them to stay close to other people for an extended period of time. In case where the work environments or the nature of work have/has made it difficult for HCWs to fully observe the DMHTT precautions, they may consider undergoing quarantine as appropriate.
3. **In the event that symptoms of respiratory tract infection** or other COVID-19-related symptoms are detected **before D10** following exposure, the affected HCWs should have specimen collected for SARS-CoV-2 testing and their organization may consider requiring them to undergo quarantine as appropriate.
 - 3.1 **In the event of negative test**, those HCWs will be allowed to continue with their routine work while strictly adhering to DMHTT precautions (Item 2).
 - 3.2 **In case of positive test**, follow the Clinical Practice Guidelines (CPG) implemented by Department of Medical Services (DMS), Ministry of Public Health (MOPH) and **undergo a quarantine for at least 7 days**. When those HCWs have fully recovered (no symptoms are present) or have had only mild cough, **they should be allowed to return to work, while strictly adhering to DMHTT precautions for at least three more days (totaling 10 days)**. After that they are expected to lead a new normal life.
 - 3.3 **During a 10-day period post exposure**, HCWS are required to report their symptoms to responsible staff (immediate supervisor or ICN nurse) **every day**.
 - 3.4 **After completion of a 10-day period**, they will be asked to follow DMHTT precautions and lead a new normal life.

Partially Vaccinated or Unvaccinated Healthcare Workers (HCWs)

Health facility must follow the guidelines in Figure 2 as follows:

1. **Three (3) samples** will be collected for SARS-CoV-2 testing by ATK or RT-PCR on **D0, D5, D10** following exposure to a confirmed case of COVID-19.
2. **While pending test results, HCWs will be suspended from work and undergo a quarantine in an appropriate place.**
 - 1.1 **In the event of negative test**, a 10-day quarantine will be completed following the last exposure date.
 - 1.2 **In case of positive test**, follow the Clinical Practice Guidelines (CPG) implemented by Department of Medical Services (DMS), Ministry of Public Health (MOPH) and **undergo a quarantine for at least 7 days**. When those HCWs have fully recovered (no symptoms are present) or have had only mild cough, **they should be allowed to return to work, while strictly adhering to DMHTT precautions for at least three more days (totaling 10 days)**. After that they are expected to lead a new normal life.
2. **During the quarantine period**, a repeat test for SARS-CoV-2 (i.e. 2nd test) should be conducted on **D5**. In the event that symptoms of respiratory tract infection or other COVID-19-related symptoms are detected before completion of 10-day quarantine period (before D10) following exposure, the affected HCWs should have specimen collected for SARS-CoV-2 testing.
 - 2.1 **In the event of negative test**, a 10-day quarantine period will be completed following the last exposure date.



- 2.2 **In case of positive test**, follow the Clinical Practice Guidelines (CPG) implemented by Department of Medical Services (DMS), Ministry of Public Health (MOPH) and **undergo a quarantine for at least 7 days**. When those HCWs have fully recovered (no symptoms are present) or have had only mild cough, **they should be allowed to return to work, while strictly adhering to DMHTT precautions for at least three more days (totaling 10 days)**. After that they are expected to lead a new normal life.
3. If no symptoms are present, another repeat test for SARS-CoV-2 (i.e. 3rd test) should be done on D10 following the last exposure date.
 - 3.1 In the event that test results come back negative, that HCW will be allowed to return to work.
 - 3.2 **In case of positive test**, follow the Clinical Practice Guidelines (CPG) implemented by Department of Medical Services (DMS), Ministry of Public Health (MOPH) and **undergo a quarantine for at least 7 days**. When those HCWs have fully recovered (no symptoms are present) or have had only mild cough, **they should be allowed to return to work, while strictly adhering to DMHTT precautions for at least three more days (totaling 10 days)**. After that they are expected to lead a new normal life.

In the event healthcare workers (HCWs) are low-risk contacts

Health facility must follow the guidelines in Figure 3 as follows:

1. **HCWs may continue to work as usual, no quarantine is needed, and they must strictly adhere to DMHTT precautions.**
2. **During a 10-day period post exposure**, if symptoms of respiratory tract infection or other COVID-19-related symptoms are detected, those HCWs will be required to have specimen collected for SARS-CoV-2 testing and undergo a quarantine in an appropriate place while pending test results.
 - 2.1 **In the event of negative test**, HCWs may continue to work as usual while strictly adhering to DMHTT precautions and infection control and prevention guidelines.
 - 3.3 **In case of positive test**, follow the Clinical Practice Guidelines (CPG) implemented by Department of Medical Services (DMS), Ministry of Public Health (MOPH) and **undergo a quarantine for at least 7 days**. When those HCWs have fully recovered (no symptoms are present) or have had only mild cough, **they should be allowed to return to work, while strictly adhering to DMHTT precautions for at least three more days (totaling 10 days)**. After that they are expected to lead a new normal life.

HCWs with previous COVID-19 infection whose recovery period is no more than 3 months

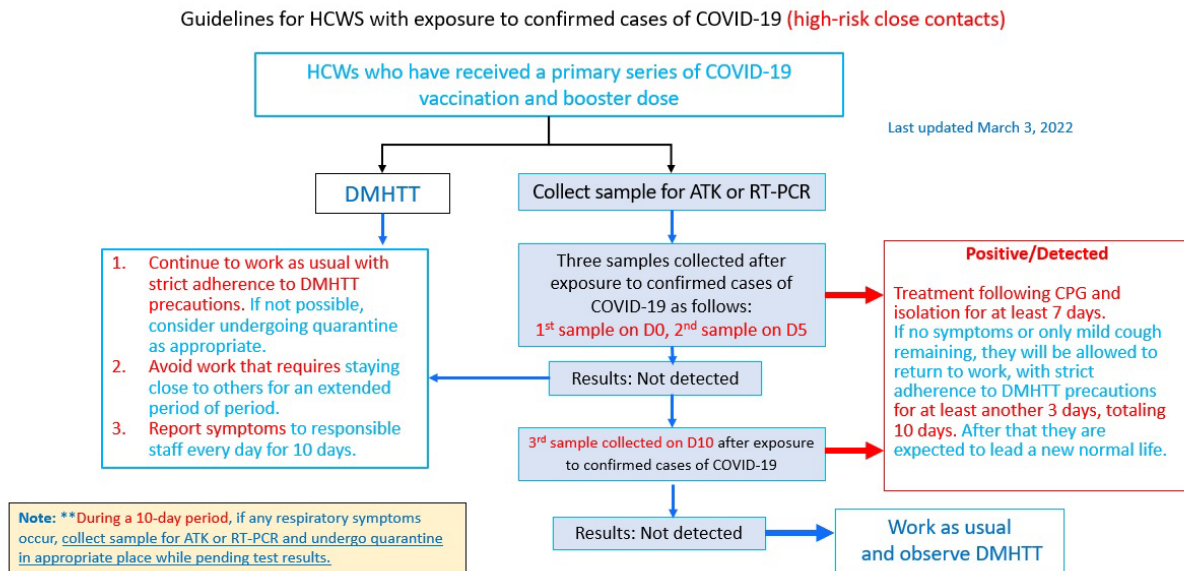
1. Repeat test for SARS-CoV-2 within three months of recovery may still detect viral RNA left from the initial infection and this is not reinfection. Therefore, there is no need to do so within this period.
2. **They are deemed to have induced a certain level of immunity against SARS-CoV-2 and should therefore be allowed to continue to work as usual, no quarantine is needed, and they must also observe DMHTT precautions.**
3. If fever or other symptoms are present, they should receive diagnosis and be provided with supportive care. However, those who have recently recovered may still have mild cough and sputum production, but this is not suggestive of active COVID-19 infection.
4. **Approximately 3-6 months post COVID-19 infection**, it is likely that they may get reinfected. Therefore, this group of HCWs should be vaccinated against COVID-19 with one dose of any authorized COVID-19 vaccine in order to boost their immunity against the virus.



Healthcare Workers (HCWs) without Exposure Risk

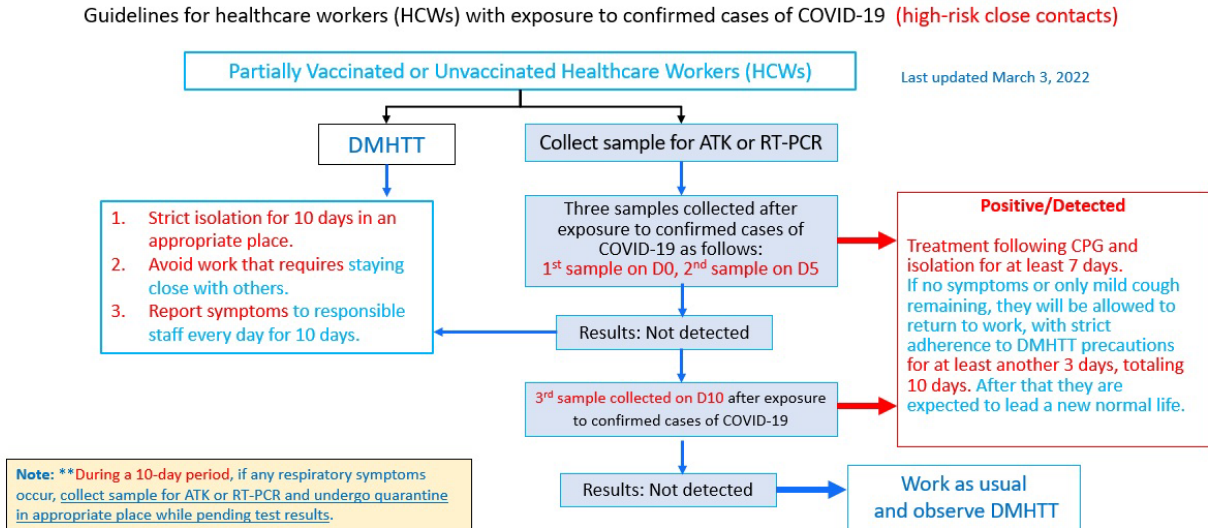
They may continue to work as usual while observing DMHTT precautions like other people.

Figure 1. Guidelines for healthcare workers (HCWs) who have received a primary series of COVID-19 vaccination and booster dose, with exposure to confirmed cases of COVID-19 (high-risk close contacts)



Note: Do not eat with others. Avoid participating in any activities in which people may take off face mask while staying together.

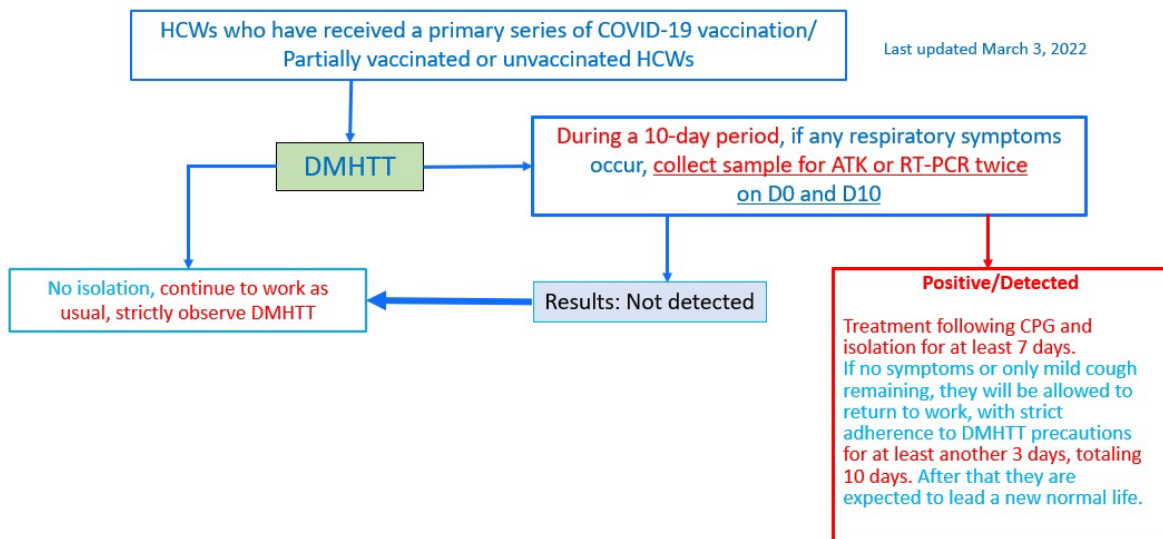
Figure 2. Guidelines for partially vaccinated or unvaccinated healthcare workers (HCWs) with exposure to confirmed cases of COVID-19 (high-risk close contacts)



Note: Regardless of the presence of symptoms, if ATK test on D0 and D5 comes back negative, HCWs will still need to strictly observe infection control and prevention guidelines in order to prevent post-exposure infection until the last test on D10 has come back negative, after which they will be required to lead a new normal life.

Figure 3. Guidelines for healthcare workers (HCWs) with exposure to confirmed cases of COVID-19 (low-risk close contacts)

Guidelines for healthcare workers (HCWs) with exposure to confirmed cases of COVID-19 (low-risk close contacts)



Note: During a 10-day period, if symptoms indicative of respiratory infection are present, HCWs should have specimen collected for RT-PCR or ATK test and undergo a quarantine in an appropriate place while pending test results.