

Proposal for Return to Work after the Movement Control Order (MCO) for COVID-19 infection

1. Should we test all employees returning to work after the Movement Control Order (MCO) for COVID-19 infection?

No, this is not necessary.

2. Why is it not necessary to test all employees for COVID-19 prior to returning to work?

- i. A single test will not be useful given that employees may get infected from the community at any point of time. It is for the same reason that healthcare facilities do not conduct COVID-19 tests on all of its employees unless they are at moderate or high risk of being infected.
- ii. A negative test may lead to **a false sense of security** in both employees and employers alike.
- iii. Risk-based testing saves cost by avoiding unnecessary testing to be conducted. There are many algorithms that have been developed to objectively assess the risk of an individual employee to be infected. These algorithms comprise a set of questions (on symptoms, travel history, contact with a positive case, etc.) that will allow the occupational safety and health officers to classify employees into different risk groups; e.g., no risk, low risk, medium risk, high risk. Only employees with moderate and high risks of being infected will need to be tested.
- iv. Based on information from the Department of Occupational Safety and Health (DOSH) Malaysia, to date, there are no employees from industrial sectors other than healthcare sectors that have been reported to have occupational COVID-19 infectious diseases.

3. Is it possible that risk-based testing will miss out an asymptomatic or pre-symptomatic worker with COVID-19 infection?

Yes, there is a small possibility. However, a single point testing also does not guarantee that all workers with COVID-19 infection will be detected. A negative test may lead to **a false sense of security**.

4. What does the law say about only testing some but not all employees for COVID-19 infection?

The current law does not dictate how or when a worker should be tested for COVID-19. Any testing should be based on the current evidence of the validity and reliability of the test. Importantly, there must be a consistent policy in conducting COVID-19 testing; Companies should not discriminate workers based on job titles, employment status, nationality, gender, race, or religion.

5. If we don't conduct universal COVID-19 testing, what is the best way for my company to know who is infected?

The recommended methods to identify workers who are potentially infected is to conduct symptoms assessment before the workers start work or shift, on a daily basis. The symptoms assessment consists of asking for presence of COVID-19 symptoms, and the exposure to other workers or people who have symptoms.

6. What are the available testing methods?

1. Real-time Polymerase Chain Reaction (RT-PCR)

Real-time PCR testing of nasopharyngeal/throat swabs is the gold standard for detection of virus in actively infected patients. PCR detects the genetic material (i.e., the RNA) of the virus. Sensitivity depends on how much virus is shed by the patient at the time of taking the nasopharyngeal/throat swab. Virus shedding is maximal from about two (2) days before symptoms (pre-symptomatic phase) to five (5) days after onset of symptoms, and declines thereafter. Virus RNA can be detected at very low levels up to 2-3 weeks after onset of illness, and sometimes for longer, but this late shedding may represent fragments of non-infectious viral proteins and the person may not be contagious.

2. Antigen kits

Antigen kits detect virus protein from nasopharyngeal swabs, and are less sensitive compared to RT-PCR. The advantages are that these tests don't require expensive laboratory equipment. However, based on experience with antigen-based rapid kits for other respiratory viruses like influenza, sensitivity varies from 34-80%, and at the moment are not recommended by the WHO for patient care (2). If used, there needs to be careful consideration of the type of population being screened and the need for RT-PCR confirmation for samples testing negative by antigen test.

3. Antibody tests

Antibody tests detect the patient's antibody response to the virus. Antibodies appear later during illness (between 5 and 7 days), and may be at low or undetectable levels in those with mild disease. Many commercial tests do not have comprehensive evaluation data to ensure sensitivity (ability to detect true positives) and specificity (ability to not misdiagnose other virus antibodies as positive). There is also insufficient understanding of the correlation of detected antibodies with protection from reinfection. Therefore, at present WHO does not recommend the use of rapid

antibody tests for patient care and diagnosis of acute disease, although they may have use in epidemiological research (2).

7. How then to protect employees and avoid a COVID-19 outbreak at workplace?

In the time of the current COVID-19 Pandemic and until there is a definitive treatment or vaccine that can protect us from the SARS-CoV 2 infection that is the cause for the COVID19 infection, we need to maintain infection control practices that help to reduce transmission. Any action should be based on the key principles of Occupational Safety and Health.

General return to work protocol are as follows:

- i. There should be workplace protocols in place that includes disease surveillance and prevention of the spread of infection.
- ii. All employers to screen staff on a daily basis for symptoms of Covid-19, including a symptom check as well as temperature assessment.
- iii. All employees to use appropriate protective equipment especially where social distancing is not possible. An appropriate mask should be worn in all public places and during work.
- iv. Work environment and surfaces need to be cleaned on a regular basis or at least twice daily.
- v. Hand disinfectants and/or hand washing facilities with soap should be made available for all workers and visitors.
- vi. Stringent social distancing measures should be implemented in the workplace. Provide and ensure employees have space to be at least one meter apart.
- vii. If a company provide accommodation for its workers, the above measures should be implemented at the place of accommodation.

8. How to conduct risk assessment at the workplace?

All workplaces should conduct HIRARC – Hazard Identification, Risk Assessment and Risk Control.

i. Hazard Identification

Hazard identification can be done through screening (symptom and temperature) of employees on entering the workplace;

- a) Implement a surveillance system to report symptoms.

- b) E.g. E-risk assessment and E-surveillance system for example an app-based system COSMOS is currently used in the Universiti Malaya Medical Centre to monitor symptoms among healthcare workers.

ii. Risk Assessment

All workplaces should conduct risk assessment on the risk of transmission and spread of the SARS CoV2 infection in their workplace based on the work activities and job description. The aim of the risk assessment is:

- a) Identification of jobs with high risk of transmission
- The job requires the employee to be in contact with others; e.g., workers in the canteen, reception or security areas.
 - The job requires the employee to perform tasks in close physical proximity to others.
 - The job requires exposure to infectious agents.
- b) Identification of high traffic work areas; e.g.,
- Receptions or Information counter
 - Canteen or pantry
 - Lift and staircase
 - Doors
 - Bathrooms and toilets
- c) Identification of workers who are at higher risk of getting the disease
- Based on type of work, e.g., exposure to potentially infectious materials
 - Based on mode of transportation, e.g., bus or public transports
 - Based on location of residence, e.g., type of housing, locality of housing
- d) Identification and protection of workers are at higher risk of developing serious illness (vulnerable employees)
- i. Employees with chronic diseases
 - ii. Pregnant employees

iii. Risk Control

The recommended type of control should be based on the Occupational Safety and Health hierarchy of control principles, i.e., Elimination, Substitution, Engineering Control, Administrative Control and Personal Protective Equipment. During a COVID-19 outbreak, when it may not be possible to eliminate

and substitute the hazard, the most effective protection measures are (listed from most effective to least effective): engineering controls, administrative controls and PPE.

a) Engineering Controls

- Increasing ventilation rates in the work environment.
- Installing physical barriers at the work areas and canteen or pantry, such as clear plastic sneeze guards.
- Replace the faucets with either auto faucets or push-type self-closing faucets
- Remove the door handle and install auto-closing and opening doors
- Installing high-efficiency air filters.

Please note:

- Currently, there are many people who are promoting disinfecting booth or tunnel which spray workers or visitors with a disinfectant like alcohol, bleach, or nanoparticles, e.g., titanium dioxide. WHO has stated that spraying the external part of the body does not kill the virus inside the body and may worsen the clinical condition of the individual. In particular, spraying of chlorine (bleach) on individuals can lead to irritation of eyes and skin, bronchospasm due to inhalation and potentially gastrointestinal effects such as nausea and vomiting.
- There is currently no evidence that spraying surfaces or large-scale misting of areas, indoor or outdoor with disinfecting agents is effective in the control of COVID-19. Further, the spraying of chemicals in the air has a health and safety concern due to the risk of skin irritation or inhalation of chemicals and the subsequent development of respiratory side effects. There is also the risk that spraying can further disperse contaminants on a surface due to the direct force of the application of a spray.
- WHO has published a myth-buster page on COVID-19 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>) which contains information on some practices where there is a lack of evidence.

b) Administrative Controls

- For job scopes where working from home is feasible, adopting work-from-home policies and utilize appropriate agreements to delineate the responsibilities of the employer and employees.
- Establishing alternating days or extra shifts that reduce the total number of employees in a facility at a given time, allowing them to maintain distance from one another while maintaining a full onsite work week.
- Considering provision of accommodation for workers coming from red zones or areas under enhanced MCO
- Implementing infectious control procedure at the workplace
- Encouraging sick workers to stay at home.
- Referring all sick workers to occupational health doctor or general practitioners for further management.
- Minimizing contact among workers, clients, and customers by replacing face-to-face meetings with virtual communications and implementing telework if feasible. Limiting the number of workers in the canteen/pantry and prayer rooms at any point of time.
- Removing shared prayers mats and *telekong* from the prayer rooms
- Limit nonessential travel. Development of travel guidelines for business and personal travel that covers both local and international travels (including self-quarantine policy). Importantly, the guidelines must be adhered by all levels of employees.
- Developing emergency communications plans, and conducting regular town-hall meetings to boost worker engagement, and address their concerns.
- Providing regular up-to-date education and training on COVID-19 risk factors and protective behaviors (e.g., cough etiquette and care of PPE).
- Regular cleaning of high touch and high traffic areas with 70% alcohol disinfectant or 10% bleaching solution; e.g., information counter, staircase handles, doorknobs, faucets, telephone, tables in the canteen/pantry, etc.
- Safe Work Practices
 - * Providing resources and a work environment that promotes personal hygiene.
 - * Requiring regular hand washing or using of alcohol-based hand rubs.
 - * Post handwashing signs in restrooms and canteen/pantry.
- Fire warning:

- * The 70% alcohol disinfectant is flammable liquid.
- * The 70% alcohol disinfectant should be store properly away from any oxidizing agents or liquids
- * Workers handling open flame, flammable materials or oxidizing agents should not use 70% alcohol disinfectant for hand washing, instead used regular soap and water.

c) Personal Protective Equipment (PPE)

For the control of the spread of the COVID-19 infection, the only recommended personal protective equipment for workers who are not in the healthcare industry or handling infectious materials is the use of face mask and frequent hand hygiene. A non-surgical grade or cloth facemask is sufficient for those who are not infected. If a worker has respiratory symptoms, a 2 or 3 ply facemask should be used. The use of the face mask is to protect others if the workers have COVID-19 or other respiratory infections, it is not a means of protecting against COVID-19. Since the COVID-19 virus has been found in patients two (2) days before the onset of the symptoms, it is recommended that all workers should wear face masks at all times at work. The only time that the mask should be removed while at the workplace is during mealtime. That is why it is important that there should be at least 1-meter distance between each worker at mealtime.

Beside the requirement for all workers to wear a non-surgical grade or cloth facemask while at work, work that required other types of PPE should continue to use the recommended PPE. All types of PPE must be:

- Selected based on the hazard to the worker.
- Properly fitted and periodically refitted, as applicable
- Consistently and properly worn when required.
- Regularly inspected, maintained, and replaced, as necessary.
- Properly removed, cleaned, and stored or disposed of, as applicable, to avoid contamination of self, others, or the environment.

9. What infection control procedures should be implemented at the workplace?

All workplaces should identify a suitable focal point (a nursing officer, a safety officer, Human Resource Manager, supervisors or any officer found to be suitable and responsible for the position)

to monitor the activities implemented against COVID-19 infection and to provide necessary guidance in case of queries.

The management should work together with the occupational health doctor to develop the standard operation procedure (SOP). The SOP should be based on the risk and requirement of the workplace.

The SARS-CoV infections can be transmitted by three (3) ways - Modes of Transmission (WHO):

- i. Droplet transmission: occurs when a person is in close contact (within 1 meter) with someone who has respiratory symptoms (e.g.: sneezing and coughing) and is therefore at risk of having his/her mucosae (mouth and nose) or conjunctiva (eyes) exposed to potentially infective respiratory droplets.
 - ii. Direct transmission: Person to person transmission by direct contact with an infected person. (E.g.: hugging, shaking hands). The virus can enter the body through nose, mouth or eyes
 - iii. Indirect transmission: When an infected person coughs, sneezes or exhales, droplets of infected fluid may get released and contaminate nearby surfaces and objects. An uninfected person may come in contact the virus by touching these surfaces and then touching their eyes, nose or mouth.
- a) Early identification and isolation of infected or potentially infected worker
- i. Worker/staff should inform head of unit/department and/or the occupational safety and health unit immediately if they are potentially infected.

This includes any one of the following in the last 14 days:

- Has a close contact to suspected/confirmed COVID-19
- Has been asked to be Quarantined for COVID-19
- Has history of International travel, for a foreign worker, this include travelling or returning from home country
- Has attended gathering of more than five (5) people
- with or without
- acute onset respiratory symptoms such as cough, runny nose, sore throat and/or shortness of breath with or without fever

- ii. Roll call at every shift or entry point screening consisting of symptoms and temperature checks.
 - iii. Worker/staff should inform head of unit/department and/or OSH immediately if they have acute onset respiratory symptoms such as cough, runny nose, sore throat and/or shortness of breath with or without fever
 - iv. There should be a clear SOP for handling a suspected case in the workplace,
 - A specific well-ventilated isolation room (preferably with attached bathroom/toilet, e.g., sick bay) has to be identified in the workplace to transfer workers suspected to have COVID-19 infection. The room should be cleaned daily and disinfected after each ill worker.
 - There should be an in-house dedicated person who is trained to attend/advise a suspected worker and arrange transfer of worker to identified health facility.
 - The suspected worker should continue to wear a mask and kept in isolation and all relevant precautions should be taken to limit the spread of the disease, until transfer to hospital.
 - If this person tests as positive the health authorities will visit the facility and will instruct on further preventive measures.
- b) Safe transport of employees;
- i. If workers are provided with transport, the following special precautions are to be taken
 - ii. Vehicles should be cleaned and disinfected (the seats, all handles, interior door panel, windows, locks, exterior door handles, poles, etc.) before transport of passengers to prevent possible cross contamination
 - iii. Arrange a vehicle with appropriate seating capacity according to the number of workers to enable them to maintain at least 1-meter distance inside the vehicle, once seated
 - iv. A designated officer must be present to open and close doors of the vehicle for passengers. The passengers must refrain from handling the doors
 - v. All workers must wear masks while being transported
- c) Prevention of viral spread in the workplace;
- i. Frequent hand hygiene
 - Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water. Washing hands with soap and water is preferred, especially when

hands are visibly dirty or greasy. But if not available, use a hand sanitizer with at least 60% alcohol.

- Put sanitizing hand rub dispensers in prominent places around the workplace.
- ii. Using facemask when at work
 - All workers shall wear masks properly at all time in the workplace. They should refrain from touching the mask or their faces, while wearing it. When not wearing mask (e.g. eating) physical distancing of >1 meter must be maintained.
 - iii. Avoid touching eyes, nose and mouth
 - Hand hygiene should be performed before and after touching face or manipulation mask.
 - iv. All workers should maintain a distance of at least 1-meter between workers and customers.
 - v. Social etiquette among co-workers
 - All face-to-face communication between co-workers and customers should be conducted with all parties wearing face mask.
 - Avoid physical contact between workers, e.g.: shaking hands/hugging and to adopt other non-touch techniques of greeting
 - Ensure physical distance of more than 1-meter is maintained at all time
 - vi. Promote good respiratory hygiene in the workplace.
 - Ensure paper tissues are available for those develop runny nose or cough at workplace
 - A closed bin with pedal control should be provided at strategic areas for hygienically disposal of tissue and face masks.
 - vii. Discourage workers from using other workers' personal belonging such as mobile phones, pens and other common equipment (e.g., telephone, desks, laptop, fax machine). If any object has been shared it must be cleaned with 70% alcohol disinfectant. Avoid sharing belongings in prayer room (e.g. telekung, sarong, prayer mat)

d) Ensure workplaces are clean and hygienic

- i. Maintain regular housekeeping practices, including routine wiping/ cleaning and disinfecting of surfaces, equipment, and other items in the work environment
 - ii. High touch surfaces and shared equipment (e.g., desks, tables telephones, keyboards, fax machine, lift buttons, doorknobs) need to be wiped with disinfectant (e.g., 10% bleach solution, 70% alcohol disinfectant, etc.) regularly. This equipment/ surfaces must be wiped down before and after use by a worker.
- e) Instructions for workers working at the information or service counter
- i. Always wear a mask
 - ii. Keep minimum distance of 1 meter from the customer or alternatively have a blind/glass/plastic shield in front of the counter
 - iii. Advise customer to wear face mask and perform hand hygiene
 - iv. Minimum handling of cash, practice hand hygiene after handling cash. When using credit/debit card ask the customer to insert and remove it from the machine.
 - v. Ensure alcohol based hand rub are available by the side of each worker and also at the counter
- f) Guide for canteen and pantry
- i. Limit number of persons in the pantry. To ensure 1-meter distance is maintained between workers/staff/customer
 - ii. Minimum distance of 1 meter is to be maintained among persons in the canteen and while queuing
 - iii. Furniture should be arranged to maintain more than 1-meter distance
 - iv. Avoid sharing foods, glasses, plates and other utensils during meals
 - v. In the food court/canteen, meals/food/beverages served in buffet style must be served by dedicated persons. Customers should not be allowed to serve themselves to avoid cross contamination
 - vi. Do not put eating utensils such as plate, bowl, fork, knife, spoon, glasses in a common container to avoid cross contamination when customers take them
 - vii. All cutlery need to be inserted in the napkin cutlery pocket and a dedicated person should give out the utensils to customers
 - viii. All foods and buffet should be closed to avoid contamination

- ix. All workers working at the canteen should wear a mask, perform hand hygiene and should not attend to work if unwell
- x. Lunch breaks and tea breaks should be given in batch-wise to prevent overcrowding the canteen or pantry
- xi. All eating areas/pantry should be kept clean and wiped down immediately after customer leaves or after each use with hospital approved disinfectant wipes
- xii. Display the menu either by display board, TV screen or under glass pad of the table

g) Restrict large gatherings and in person meeting

- i. Alternative methods of communication are recommended like video conferencing.
- ii. If in person meetings are unavoidable, the following should be enforced:
 - before the event ensure all furniture is cleaned and disinfected (e.g., chairs, tables)
 - minimize the number of attendees
 - to ensure the room/hall used is large enough to accommodate attendees and ensure 1-meter distance can be maintained
 - a reminder email should be send out to all participants one day prior to the event/meeting to advice anyone who is unwell to not attend and seek treatment immediately
 - to perform roll-call and/or temperature check at the beginning. If anyone is unwell, to declare themselves to chairperson and leave the meeting immediately
 - to ensure the meeting room has tissue and hand sanitisers available for all participants
 - to ensure adequate ventilation in the room
 - limit duration of meeting less than 2 hours if possible
 - All participants must wear a face mask during in person meeting
 - Hugging and shaking hands is not allowed
 - At the end of the event, ensure the room is cleaned and disinfected

h) Good ventilation

Ensure the workplace is well ventilated and adequate spacing between workers is provided.

i) Monitoring and feedback

Workplace should put in place a monitoring system to ensure that workers and customers adhere to infection control measures. (i.e., having checklist and feedback mechanisms)

10. If we have already implemented the actions or procedures that are stated or recommended above, can workplace related COVID-19 infection or outbreak be prevented?

No, not necessarily. All the preventive and protective measures that have been put in the workplace can be undone by unpredictable human behavior such as violation of physical distancing measures, lack of hand hygiene or incorrect use of personal protective equipment. In order to minimize the risk of COVID-19 infection at workplace, employees must be constantly engaged in dialogues about COVID-19 readiness. All employees must be well equipped with knowledge and understanding of the disease, and its prevention and control measures, be it at workplace or in the community. The OSH principles of control measure should be the basis of an organization's actions, the control measure that required the least human decision making is preferred.

11. How can organizations empower its workers upon return to work to ensure good knowledge and understanding of COVID-19?

Organizations have a duty to identify unmet informational needs among its employees and use this information to develop appropriate health promotional materials for COVID-19. These materials must be tailored according to the socio-demographic characteristics of the workers including their intellectual capabilities and language proficiencies. The COVID-19 resource should include fact sheets, checklists, and frequently asked questions that caters to all workers within the organization.

12. How to handle situations in which the workers are not truthful when disclosing their symptoms, or risk factors of COVID-19 infection?

Workers may not be forthcoming in declaring symptoms and risk factors related to COVID-19 due to a variety of factors. It is important to understand these reasons in order to prevent situations such as the above.

Common reasons are lack of awareness of the disease transmission and prevention, fear of discrimination and stigmatization by co-workers, job insecurity, etc. While the former is related to health promotion at workplace, the latter is related to 'trust'. Companies must have adequate policies to ensure that 'trust' is built. Maintaining confidentiality and minimizing stigma are key components.

Apart from avoiding misconceptions, misinformation, and rumors through health promotion, companies will have to build collective solidarity. Where a worker is required to self-quarantine, leave policies and pay policies must be ensured to be fair. In short, organizations may need to re-evaluate their leave and pay policies amidst the pandemic.

When all of the above are ensured, it is fair for companies to expect their workers to be truthful with declaration of symptoms and risk factors. Disciplinary actions maybe taken against employees who withheld important information on their disease status, or risk status after careful deliberation.

13. How could technology help in avoiding COVID-19 outbreak at workplace?

- a. Risk stratification algorithm could identify workers most at risk of contracting COVID-19. Appropriate monitoring and education can be targeted to groups according to their risk profile
- b. Automatic symptom monitoring application will provide real time data on the health of workers and identify those needing testing and isolation. The data can also be used for human resource planning and contact tracing.
- c. Automated messaging system can also inform workers what action they should take and empower them on infection and prevention control and practice through delivery of targeted education materials

Monitoring systems must be in place to ensure compliance with safety protocols and identify infections among employees.

References:

1. CDC OSHA. Guidance on Preparing Workplaces for COVID-19. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html> (Accessed on 25 April 2020)
2. WHO. Advice on the use of point-of-care immunodiagnostic tests for COVID-19 [8 April 2020]. Available at: <https://www.who.int/news-room/commentaries/detail/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19> [Accessed on 25 April 2020]
3. Getting your workplace ready for COVID-19 -World Health Organization
www.who.int › docs › default-source › coronaviruses

4. Coronavirus disease (COVID-19) advice for the public
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
5. Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations. WHO/2019-nCoV/Sci_Brief/Transmission_modes/2020.2
6. <https://www.natlawreview.com/article/covid-19-considerations-employee-testing>
7. <https://www.pillsburylaw.com/en/news-and-insights/mitigating-employment-law-risks-as-covid-19-coronavirus-spreads.html>

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