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AMPATHCHAT

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How to minimise the risk of COVID-19 infections in the workplace

- Implement the most current version of regulations on health and safety measures to reduce and eliminate the escalation of COVID-19 infections in the workplace, as determined by the Department of Employment and Labour. Refer to the National Institute for Occupational Health (NIOH) at www.nioh.ac.za for detailed resources. This includes daily symptom screening (e.g. by means of a questionnaire) as stipulated in the Guidelines for Symptom Monitoring and Management of Workers for SARS-CoV-2 infection (version 5: 19 August 2020), which is available on the aforementioned website.
- Maintain preventive measures in the workplace, e.g. social distancing, good hygiene and cleaning practices, the wearing of cloth masks, etc., regardless of proven or perceived prior exposure to SARS-COV-2.
- Employ a screening and laboratory testing strategy to assist employers and occupational health providers to minimise the risk of new COVID-19 cases in the workplace.

OPTION 1: Parallel risk mitigation strategy using COVID-19 antibody testing to minimise the risk of new COVID-19 infections in the workplace

This option offers risk mitigation for regular workplace settings.

For employees with a sudden onset of symptoms suggestive of COVID-19, identified by daily symptom screening (questionnaire): Refer to occupational health practitioner

to determine the need for SARS-CoV-2 PCR test, and follow NIOH guidelines.

AND

Routine antibody screening tests for asymptomatic employees:

As a starting point, it is recommended that all employees be tested initially using COVID-19 antibody tests (IgG or IgM/IgG) to identify individuals who have had previous (or possibly recent) exposure to COVID-19. All employees with positive COVID-19 antibody tests should be tested by PCR to exclude a current infection. (An individual may start producing antibodies, but still be infectious.) All employees who test positive for COVID-19 by PCR should isolate in accordance with the regulations of the Department of Health (DOH).

We recommend that subsequent COVID-19 antibody screening of employees with previously negative COVID-19 antibodies be repeated at regular intervals (e.g. monthly), as many COVID-19 infections are asymptomatic. All employees who subsequently test positive for COVID-19 antibodies, should be tested by PCR to exclude a current COVID-19 infection, as described above. This testing protocol should be continued until the risk of COVID-19 infection in the workplace is mitigated, e.g. a vaccine or treatment is available or herd-immunity is acquired.

Workers who have already been diagnosed with COVID-19 can be excluded from further antibody testing algorithms. If recently diagnosed, they should undergo health monitoring and de-isolation as described by protocols published by the National Institute of Communicable Diseases (NICD) (www.nicd.ac.za)



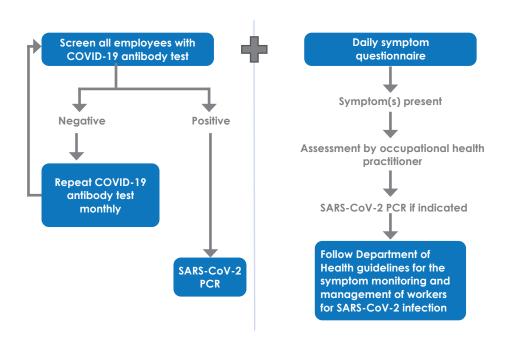
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Please note: It has not been confirmed whether the presence of IgG antibodies to SARS-COV-2 correlates with protective immunity to COVID-19, or what the potential duration of protective immunity would be. It is therefore imperative that employees, regardless of their COVID-19 antibody status, adhere strictly to preventative measures in the workplace. Until sufficient data becomes available confirming protective immunity, employees with antibodies should still be managed in the same manner as those without antibodies when they develop COVID-like symptoms or have contact with a confirmed COVID case.

In summary

- Screen all employees with COVID-19 IgG antibody tests initially.
- Employees with positive antibodies and without a previous, confirmed COVID-19 infection, should be tested by COVID-19 PCR.
- Employees with a positive COVID-19 PCR should be isolated and managed as required by the Department of Health.
- Screen vulnerable employees without COVID-19 antibodies regularly (e.g. monthly) and manage outcomes as described above.

Option 1



OPTION 2: Parallel risk mitigation strategy using COVID-19 antibody testing to minimise the risk of new COVID-19 infections for high-risk settings

This option offers advanced risk mitigation for high-risk occupational settings such as the aviation industry (personnel screening prior to flights) or athletes prior to sporting events. The testing protocol includes initial COVID-19 antibody testing for all employees to identify individuals who have had previous (or possibly recent) exposure to COVID-19, and subsequent SARS-CoV-2 PCR for employees who test positive for COVID-19 antibodies to exclude a current infection, as per Option 1. In addition, all employees who initially test negative for antibodies to SARS-CoV-2, should be screened for COVID-19 prior to either flights or sporting events by both a COVID-19 antibody test, as well as a SARS-CoV-2 PCR.

Option 2

