Health Care Worker COVID-19 Exposure and Symptom Management – Interim Advice from NRHCC Clinical Technical Advisory Group.

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This paper provides clinical advice for health providers across the Northern Region on the management of health care workers who are:

- unwell with symptoms consistent with COVID-19 and their return to work,
- potentially exposed to COVID-19 and become contacts of suspected, probable and confirmed COVID-19 cases, and their management.

The algorithms in this document have been designed to help people think through the questions and issues that are relevant to making decisions about whether symptomatic or exposed health care workers are able to fulfil their normal working duties, and who needs to be involved in those decisions. While the specific circumstances of those decisions may differ across the health sector, it is anticipated that the key questions and issues will be similar and therefore relevant to a range of parties.

This advice has been developed at the beginning of April 2020, taking into account the New Zealand COVID-19 situation at this point in time and the New Zealand case definition for COVID-19 infection as at 16 April 2020. It should be considered interim, given the dynamic nature of the evolving COVID-19 pandemic, and will be reviewed and updated as new evidence and national advice becomes available.

This advice has been developed by the Clinical Technical Advisory Group (CTAG) of the Northern Region Health Coordination Centre, which consists of clinicians with expertise in public health, infection prevention and control, laboratory, primary care, secondary care, ICU, respiratory medicine, paediatrics, occupational health and emergency services. The content draws on national guidance where available, along with looking at approaches in other countries while acknowledging that limited published options exist.

Due to the limited evidence on transmissibility of the virus post symptoms, a pragmatic approach has been recommended, aiming to balance the risk to other staff and patients, and length of stand down periods for staff to ensure sufficient key workers are available to sustain services and viable rosters. The updated COVID-19 suspected case definition is more sensitive but less specific, so at this point in time, less than 1% of tests are positive in the Northern Region.

Current testing is reliant on laboratory detection of viral RNA in respiratory secretions by PCR; access to point of care PCR testing is being expedited. Serology is not currently available.

Roles of various parties in management of COVID-19

Symptomatic staff need to continue to seek care from primary health care; as below, other parties consider and work together with staff to address workplace and public health risk, but are not responsible for the treatment of the person's illness. In residential facilities such as Aged Residential Care, primary health care practitioners (GPs, Nurse Practitioners)

can play an important role in assessing staff as well as the resident's symptoms and contribute to decision making about deployment of staff.

Public Health Units (PHUs) are responsible for assessment of public health risks related to confirmed and probable COVID-19 cases (e.g. when in institutional settings),including case scoping, monitoring and release from isolation, contact identification and categorisation, contact tracing and follow up of household contacts and other community-based high-risk contact groups, as well as public health surveillance. Where the confirmed or probable case is a DHB staff member or an individual who has been an in-patient during their infectious period, an appropriate referral(s) will be made to the Occupational Health and/or Infection Prevention and Control services respectively for identification and follow up of close and casual contacts amongst staff and remaining in-patients (noting that exposed out-patients or in patients who are now discharged will be followed up by public health). Other close contacts may be referred to the National Contract Tracing Centre by the PHU.

In DHB settings, Occupational Health Services will support workplace decisions about quarantine of staff that are close contacts and their return to work. Occupational Health departments will also clear for return to work, confirmed or probable cases that have been released from isolation by public health. After-hours support for DHB contact tracing of staff and/or patients may be the responsibility of Infectious Diseases and/or Clinical Microbiology depending on local practice.

Infection Prevention and Control provide leadership on the prevention of harm caused by infection to patients and health workers, and the reduction of risk in healthcare-associated infections.

Prevention of health care worker COVID-19 exposure

Measures to reduce close contact between workers (e.g. physical distancing for team handovers, not sitting together at meal breaks) are important to reinforce, to limit the number of staff who are close contacts of each other through work. All health care workers should be following standard precautions and safety practices associated with their roles, along with any relevant specific recommendations, including PPE, for COVID-19 protection. Outside of this, if health care workers cannot physically distance from each other in performing their tasks due to workplace constraints (e.g. position of testing machines within a laboratory or the need to perform pressure cares on ventilated patients), surgical mask wearing and hand/sneeze/cough hygiene is considered to provide an adequate degree of protection. It is also important for healthcare workers to provide leadership in their communities by staying within their work and home bubbles, thereby reducing any non-essential contact outside of work.

Cohorting of patients/residents and staff to reduce potential transmission between different parts of a facility is also an important prevention strategy, as is strict hand hygiene and enhanced cleaning (e.g. frequent cleaning/wiping of high touch surfaces).

Vulnerability in relation to COVID-19 relates not only to the population who may become infected but also to settings where there may be substantial variability in the extent of existing infection prevention and control practice.

Health care workers who become unwell

Health care workers with acute respiratory illness should not work while they are symptomatic. They are expected to self-monitor for signs of illness of coronavirus, self-isolate and report illness to managers, if it occurs. Processes are being developed to expedite COVID-19 testing and access to results for health care workers and those with whom they are living (people in their 'bubble' in the current state of Level 4 lockdown in New Zealand).

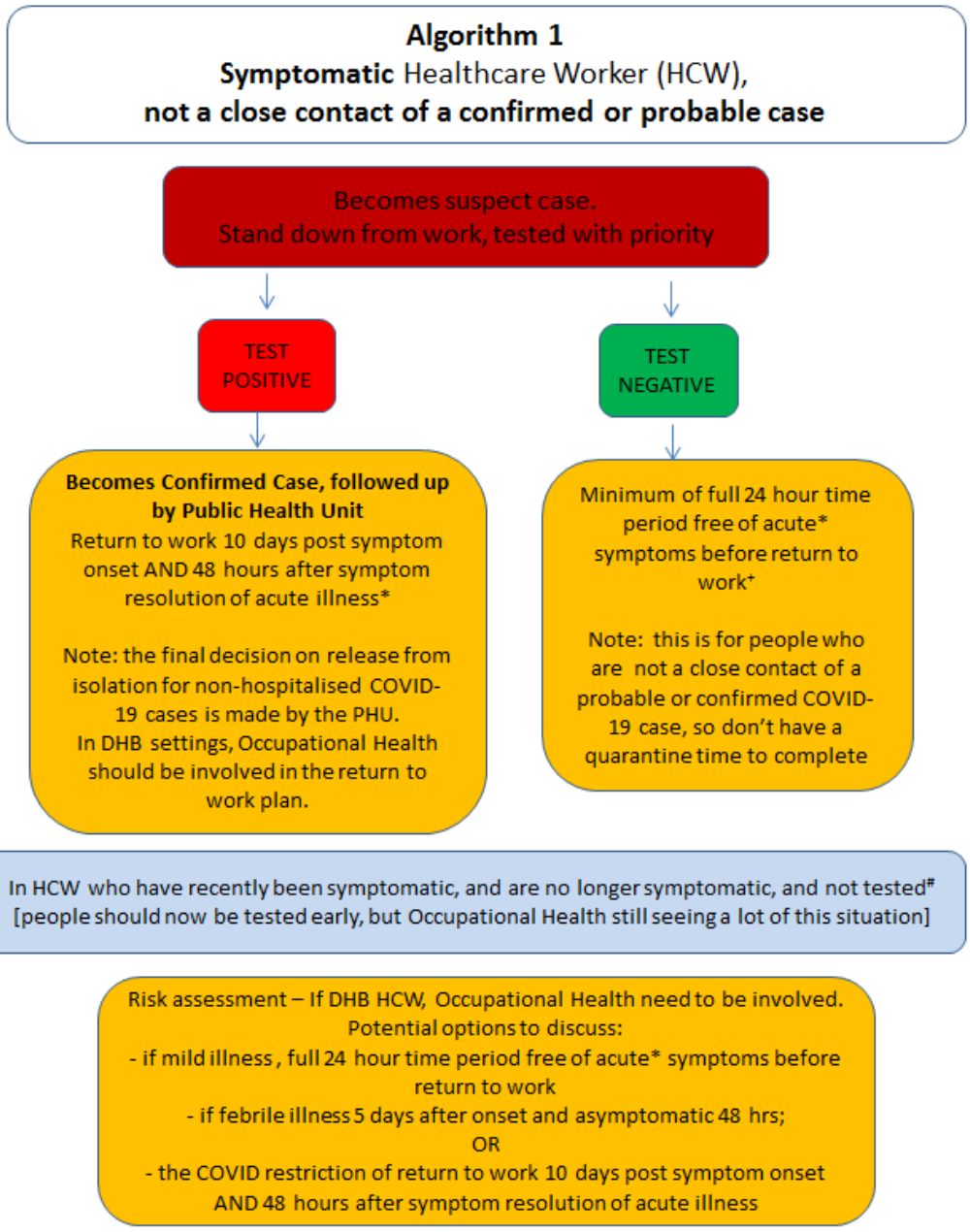
There is strong clinical endorsement of the importance of symptomatic health care workers being prioritised for COVID-19 testing; there should be a low threshold for testing in health care workers. In some DHBs this is likely to be by directing symptomatic staff to community testing centres; in other situations, Occupational Health may organise testing in a non-patient contact part of the hospital to expedite timeliness of testing and receiving results. In reality, prioritisation of health care workers for testing is only possible where there is local laboratory capacity to test local DHB specimens. Arrangements for testing need to take into account equitable access to timely results for health care workers across all parts of the health system (e.g. primary care). What is clear is that unwell staff, who otherwise don't need acute hospital care, should not come to a patient facing DHB facility to be tested and hence increase the risk of exposing patients and other staff.

Recommendations on return to work decisions

The following flow charts provide recommendations and guidance in decision making on return to work decisions for

- Algorithm 1: Symptomatic[1] healthcare workers who are not a close contact of a confirmed or probable case
- Algorithm 2: Healthcare workers who are asymptomatic contacts of suspected Covid-19 Case, while test results of suspected case awaited, where the suspected case is a patient/resident or co-worker
- Algorithm 3: Healthcare workers who are asymptomatic contacts of suspected Covid-19 Case, where the suspected case is in the HCW's household/'bubble'
- two flowcharts for asymptomatic healthcare workers confirmed as contacts of probable or confirmed Covid-19 Case – Algorithm 4: specifically for Aged Residential Care Facilities, and Algorithm 5: for DHBs where Occupational Health teams are likely to be leading the workplace response.

[1] Any acute respiratory infection with at least one of the following symptoms: cough, sore throat, shortness of breath, coryza , anosmia with or without fever. Fever for the purposes of this document is defined as >38°C.



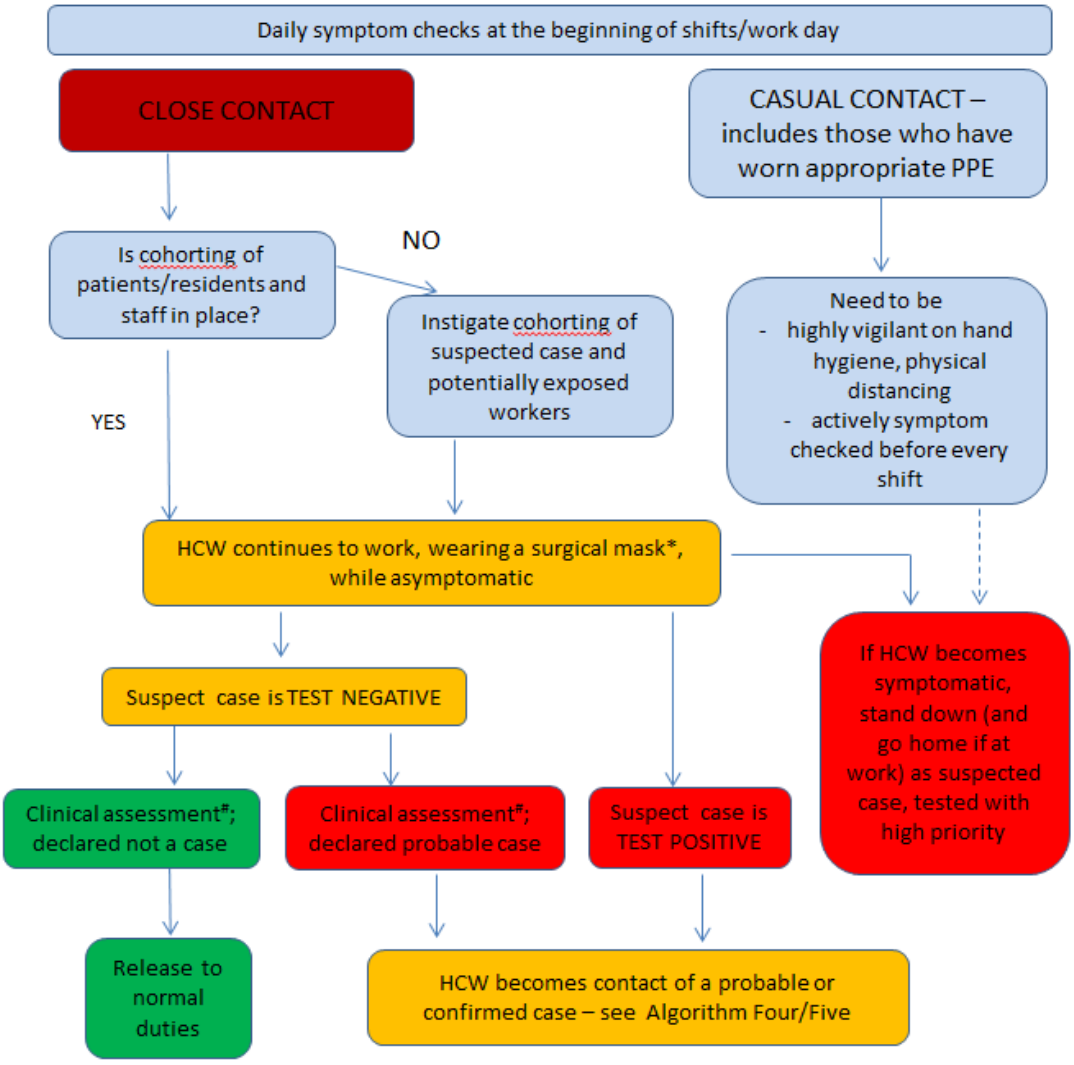
*Noting that cough and anosmia may persist

+ For shift workers it is important a minimum of a full 24 hour exclusion is adhered to (i.e. workers cannot return to work at the next available shift if this means they will have less than a 24 hour period symptom free before return to work)

In general testing of asymptomatic people is not recommended. Individual cases cases should be discussed with relevant local clinicians.

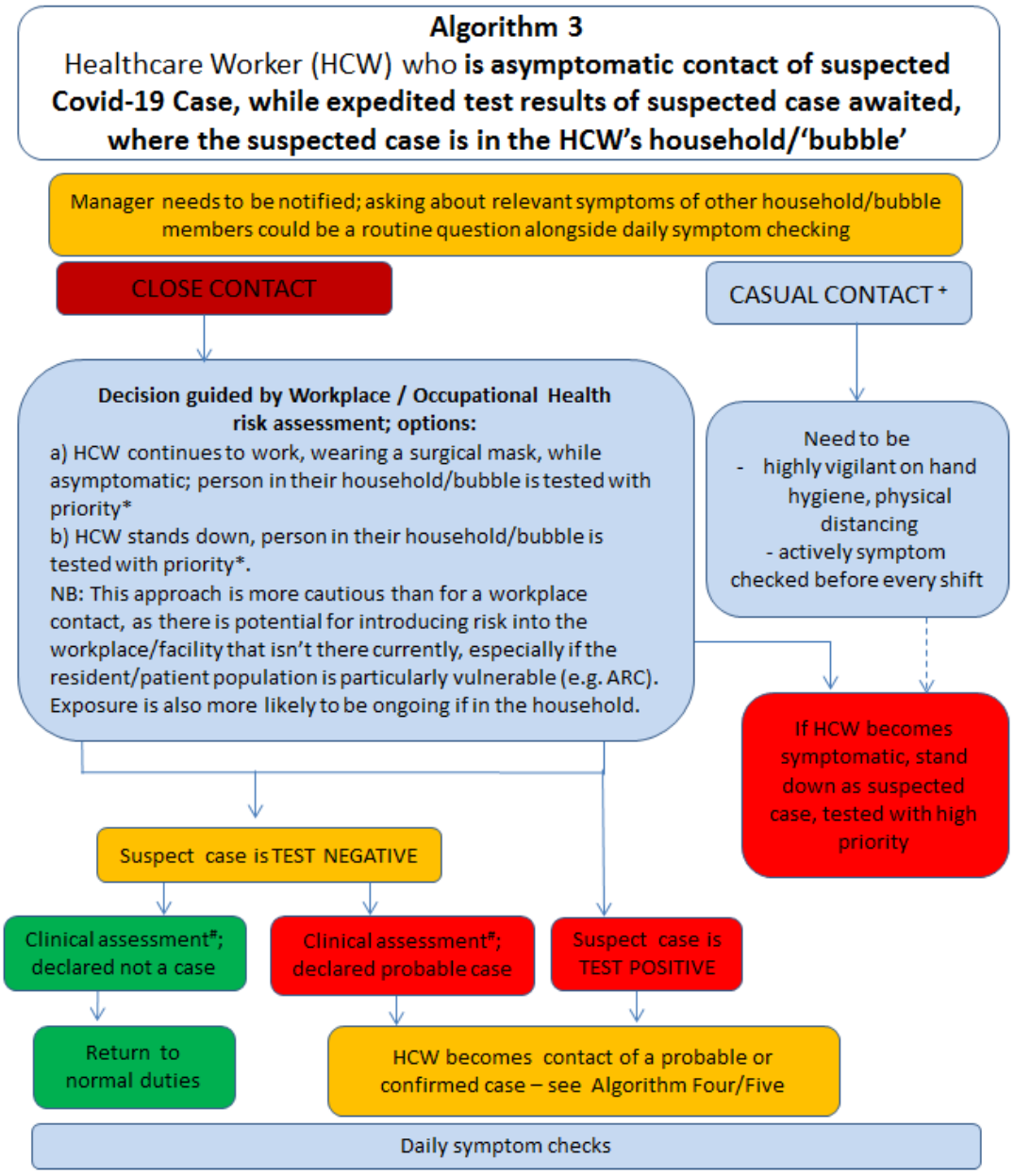
Algorithm 2

Healthcare Worker (HCW) who **is asymptomatic contact of suspected Covid-19 Case, while expedited test results of suspected case awaited – suspected case is patient/resident, co-worker**



* To protect patients/residents, in case the HCW becomes unwell and is infectious prior to symptoms

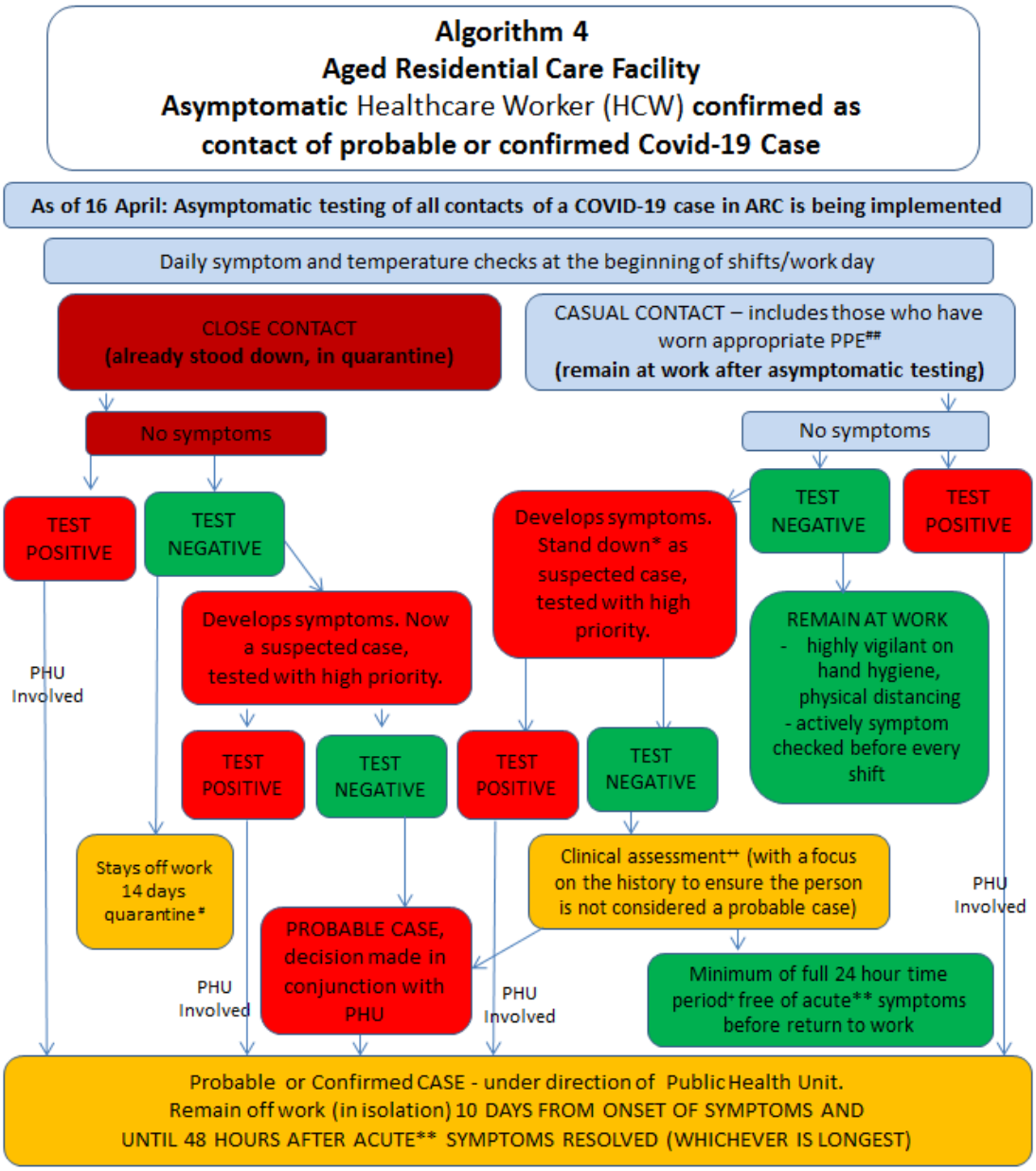
Clinical assessment, for staff in DHB facilities Infectious Diseases physician/Clinical Microbiologist involved; and referral to Public Health Unit. Occupational Health/Infection Prevention and Control would also need to be involved in staff deployment decision. In other settings the PHU is likely to be more involved in the decision.



+ Casual contact is rare in household settings

* If there is ongoing contact with the unwell person who is the suspected case, the health care worker should stand down (option b). If in the future community prevalence increases, there may be a case to ask staff/offer staff the opportunity to move into a hotel, if they will continue to be exposed to their household/bubble member while that person awaits test results

Clinical assessment, likely to be primarily by primary care in discussion with Occupational Health and Infectious Diseases physician/Clinical Microbiologist depending on the particular patient and location of work of the HCW



Casual contact is rare in households

*If in the middle of a shift, should stand down straightaway

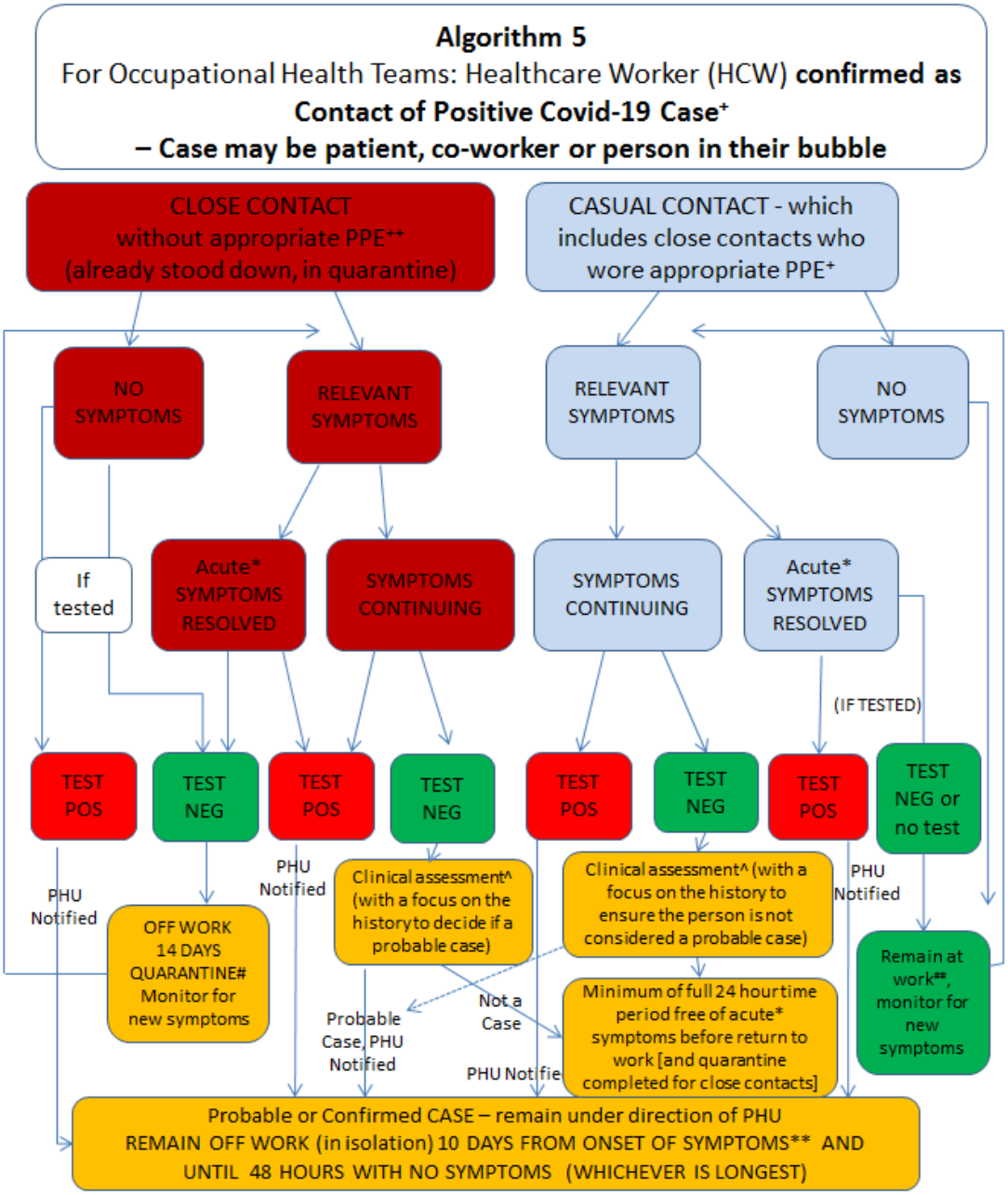
Guidance about quarantine is available at https://www.arphs.health.nz/assets/Uploads/Resources/Disease-and-illness/Coronavirus/Information-for-close-contacts.pdf

There may be situations where there is consideration of return to work before 14 days, after full risk assessment. Also if the case is in the HCW's bubble, there are implications for housing for staff where there is ongoing exposure.

++ Likely to be done collaboratively between GP/PHU/Infectious Diseases physician/Clinical Microbiologist

+ For shift workers it is important a minimum of a full 24 hour exclusion is adhered to (i.e. workers cannot return to work at the next available shift if this means they will have less than a 24 hour period symptom free before returning to work)

**Noting that cough and anosmia may persist



+ Casual contact is rare in household settings. If the case is in the HCW's bubble, there are implications for housing for staff where there is ongoing exposure

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++ PPE for HCW in direct contact with COVID-10 cases is surgical mask (N95 if AGP), eye protection (goggles or face shield), gloves and fluid resistant long sleeve gown (plastic apron if not direct patient contact)

There may be situations where there is consideration of return to work before 14 days, after full risk assessment

^ Likely to be done collaboratively between GP/Infectious Diseases physician/Clinical Microbiologist /Occupational Health

** For severe illness requiring hospitalisation, 10 days since hospital discharge

Assuming it has been full 24 hour time period since acute symptom resolution

Appendix: Definitions

Close contact[2]

Close contacts are those that are likely to be at a higher risk of being infected.

'Close contact' is defined as any person with the following exposure to a suspect, confirmed or probable case during the case's infectious period, without appropriate personal protective equipment (PPE):

- direct contact with the body fluids or the [contents of] laboratory specimens of a case
- presence in the same room in a health care setting when an aerosol-generating procedure is undertaken on a case
- living in the same household or household-like setting (e.g. shared section of in a hostel) with a case
- face-to-face contact in any setting within two metres of a case for 15 minutes or more
- having been in a closed environment (e.g. a classroom, hospital waiting room, or conveyance other than aircraft) within 2 metres of a case for 15 minutes or more
- having been seated on an aircraft within 2 metres of a case (for economy class this would mean 2 seats in any direction including seats across the aisle, other classes would require further assessment)
- aircraft crew exposed to a case (a risk assessment conducted by the airline is required to identify which crew should be managed as close contacts).

Casual contact[3]

Any person with exposure to the case who does not meet the criteria for a close contact

Case definition

Updates to the NZ COVID-19 case definition are provided on the Ministry of Health website: https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-novel-coronavirus-information-specific-audiences/covid-19-novel-coronavirus-resources-health-professionals/case-definition-covid-19-infection

Cohorting

Grouping staff or patients/residents together within a facility or part of a facility/service. In the case of COVID this can minimise the potential number of staff or residents who would need to be stood down or isolated if someone is identified as a suspected, probable or confirmed case.

[2] Updated advice for health professionals: novel coronavirus (COVID-19), 8 April 2020. Ministry of Health https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-novel-coronavirus-information-specific-audiences/covid-19-novel-coronavirus-resources-health-professionals#healthprof

[3] Ibid

References

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