

# Care for health workers exposed to the new coronavirus (COVID-19) in health facilities

**PAHO/PHE/IM/Covid-19/20-005**  
*(Interim Recommendations, 13 April 2020)*

## Objective

- Provide guidelines for caring for health workers exposed to the novel coronavirus (COVID-19) in health facilities, as well as management of occupational exposure to the virus.
- This tool will help determine the risk of infection in health professionals who have been exposed to a patient with COVID-19 and will guide decisions on appropriate actions. It will also provide recommendations for proper management of these health professionals, in accordance with risk of infection.\*

These recommendations are preliminary and are subject to review as new evidence becomes available.†

## Key considerations

- In December 2019, a new coronavirus (SARS-CoV-2) was identified as the causative agent of a severe acute respiratory disease (COVID-19) in Wuhan, China. (1, 2) The virus spread to different countries and the World Health Organization (WHO) declared a pandemic on 11 March 2020. (3)
- According to current evidence, the COVID-19 virus is transmitted among people through close contact and droplets, and airborne transmission can occur during aerosol-generating procedures (AGPs) (4).
- **Aerosol-generating procedures (AGPs)†** play a key role in spread of the disease (1, 9), as do contaminated hands (of health workers), surfaces, and fomites. This chain can be interrupted with proper use of respirators by all health professionals during AGPs and with hand hygiene following WHO’s “5 Moments.” (4)
- Transmission of COVID-19 to health professionals is associated with handling and caring for patients with COVID-19 and can occur and be amplified by noncompliance with standard precautions, based on transmission mechanisms, especially in healthcare settings. (5, 6)
  - In a description of 138 patients infected by COVID-19 treated in Wuhan (China), 40 patients (29%) were identified as health professionals, which suggests how vulnerable these workers are. (7)
  - The National Health Commission of China showed that more than 3,300 health workers have been infected in the initial phases of the epidemic. (8)
- As of the date of this publication, the following precautions are recommended for care of patients with suspected or confirmed COVID-19:
  - Precautions for any suspected or confirmed COVID-19 case: **standard + contact + droplet transmission precautions.**
  - Precautions for any suspected or confirmed COVID-19 case and AGPs: **standard + contact + airborne transmission (aerosols or droplet nuclei) precautions.**§

\* For more information on health workers and management of the risk associated with COVID-19, consult *World Health Organization. Health workers exposure risk assessment and management in the context of COVID-19 virus, interim guidance. 4 march 2020. Geneva: World Health Organization; 2020.*

† Up-to-date information on COVID-19 is available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.

‡ Aerosol-generating procedures (AGPs) include the following: positive pressure ventilation (BiPAP and CPAP), endotracheal intubation, airway suction, high-frequency oscillatory ventilation, tracheostomy, thoracic physiotherapy, nebulizer treatment, sputum induction, bronchoscopy, and autopsy.

§ To obtain the most up-to-date information for COVID-19 infection prevention and control, refer to: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>.

## Glossary

<b>Active monitoring</b>	Monitoring, by health workers themselves, of respiratory signs and symptoms, as well as fever, with active reporting to the health authorities or to the hospital's occupational health authorities regarding their health status or following local regulations (Annex 1).
<b>Acute respiratory illness</b>	Clinical syndrome characterized by fever and at least one sign or symptom such as cough (with or without sputum production) or difficulty breathing. With COVID-19, patients can present nonspecific symptoms, such as fatigue, loss of appetite, malaise, muscle pain, sore throat, shortness of breath, stuffy nose, or headache. On rare occasions, patients can also present diarrhea, nausea, and vomiting. Cases of loss of sense of smell were described.
<b>High-risk exposure</b>	Close contact with a case of COVID-19 in the community or in the home; providing direct care to a COVID-19 patient (physical examination, nursing care, carrying out AGPs, airway sampling) or contact with bodily fluids from COVID-19 cases or with a contaminated environment without proper use of personal protective equipment (PPE), or not performing hand hygiene when providing patient care.
<b>Low-risk exposure in health services</b>	Providing direct care to someone with suspected or confirmed COVID-19, following recommendations for use of PPE in different clinical activities.
<b>Self-monitoring</b>	Monitoring, by health workers themselves, of respiratory signs and symptoms, as well as fever, when exposed to risk of COVID-19 infection in the health facility. Health professionals should notify the health service where they work or follow local regulations (Annex 1).

**Care for health workers exposed to COVID-19 in health facilities**

- Health professionals should be evaluated by a medical professional before being given sick leave. This should also be reported, according to the procedures of the facility’s occupational health service.
- Health workers must take standard precautions when returning to the health service:
  - Always perform hand hygiene when caring for patients.
  - Rational and proper use of PPE.
  - Safe handling of sharps.
  - Use of sterile medical equipment.
  - Keeping the hospital environment clean.
  - Proper management of hospital waste.
- Ensure rational and proper use of PPE: proper donning and doffing of PPE because of risk of contamination.\*\* If disposable equipment is used (e.g., single-use masks, gloves, or face shields), discard it in the proper place and wash your hands correctly; never reuse disposable materials.

**Management of health workers exposed to COVID-19**

Table 1 presents situations for health professionals potentially exposed in health facilities.

**Table 1 – Actions to take when a health worker has been exposed to COVID-19 in health facilities**

Exposure risk	Health status		Actions	
		Sick leave from work	Surveillance / Monitoring of signs and symptoms	
Health worker with low-risk exposure in health facilities	Asymptomatic	Not indicated.	Monitor appearance of respiratory symptoms and/or fever; self-monitoring. Seek medical care if signs and symptoms appear. Report to supervisor.	
Health worker with high-risk exposure to a COVID-19 patient in the health service.	Asymptomatic	Indicated. Stop working for 14 days from last exposure.	Monitor appearance of respiratory symptoms or fever. Active monitoring. Screen if signs and symptoms appear. Home quarantine. (b)	
Health worker is a contact of someone with confirmed COVID-19 at home	Asymptomatic	Indicated. Stop working for 14 days from last exposure.	Monitor appearance of respiratory symptoms or fever. Active monitoring. Screen if signs and symptoms appear. Home quarantine.	
Health worker with low- or high-risk exposure in health facilities or at home	Symptomatic	Indicated. Stop working until remission of symptoms and two negative PCRs 24 hours apart. If PCR testing is not available, 7 days after remission of symptoms. (b)	Clinical case management (c) according to local protocols. (a)	

**Comments**

(a) Except for pregnant women, people over 60 years of age, and people with diseases that cause current immunosuppression or people with decompensated chronic diseases, who should be evaluated by the attending physician and by the workplace physician.

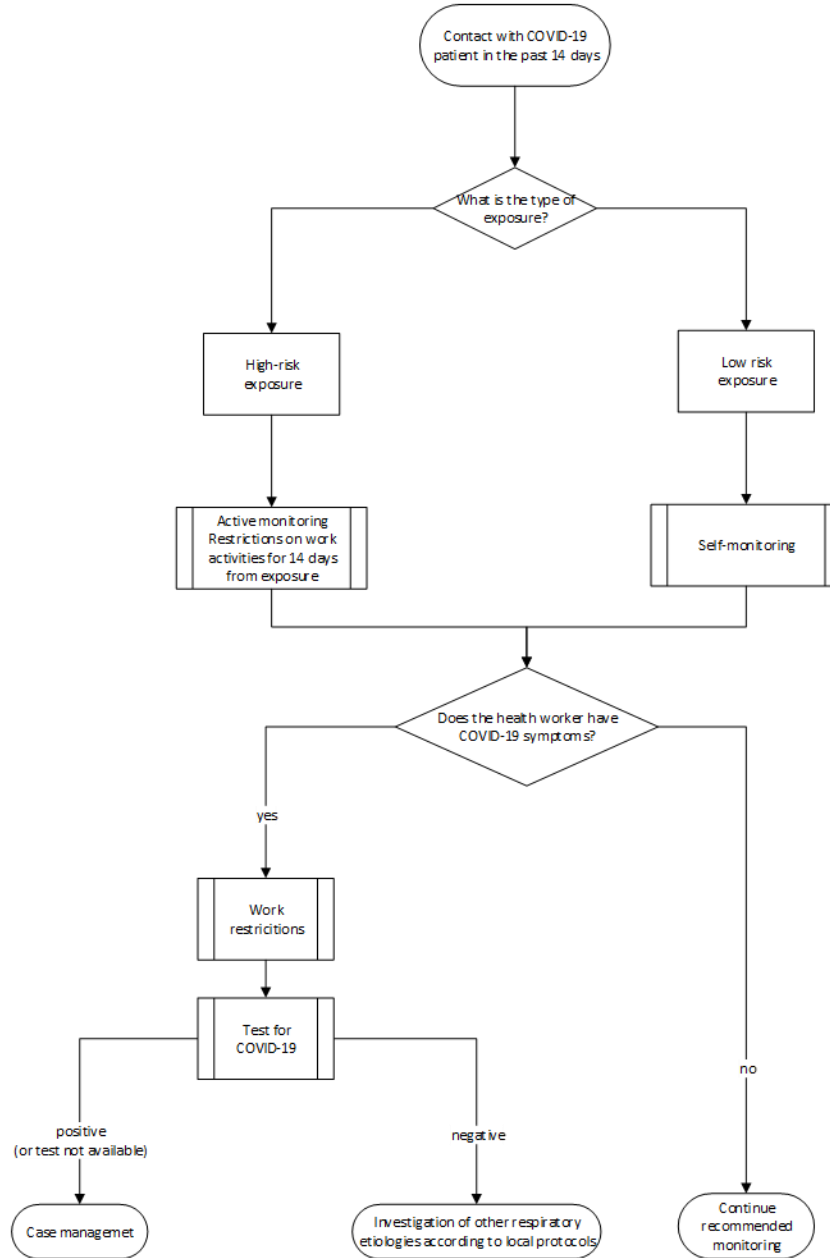
(b) Restrict contact between health workers and immunocompromised patients until 14 days following remission of symptoms. For more information on quarantine, consult: *World Health Organization. (2020). Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19): interim guidance, 19 March 2020. World Health Organization. <https://apps.who.int/iris/handle/10665/331497>. License: CC BY-NC-SA 3.0 IGO.* (c) For more information on clinical management of COVID-19, consult: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management>.

\*\* For the sequence for donning and doffing of PPE, consult the infographics at: <https://www.paho.org/en/topics/coronavirus-infections/coronavirus-disease-covid-19/covid-19-communication-materials>.

Management flow for health workers exposed to COVID-19

Figure 1 presents the management flow for health workers exposed to COVID-19. This should be used together with Table 1 and the Annex.

Figure 1 – Management flow for health workers exposed to COVID-19



Source: PAHO, adapted from (9) and (10).

## Immunization against seasonal influenza

- Health workers are a priority group for vaccination against seasonal influenza.<sup>††</sup> This contributes to individual protection, maintaining health services operations, and reducing transmission of influenza virus to the most vulnerable patients, including COVID-19 patients.
- The occupational health department should organize vaccination of health workers against influenza and other diseases according to the country's recommended vaccination schedule.

## References

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<sup>††</sup> [https://www.who.int/immunization/policy/position\\_papers/influenza/en/](https://www.who.int/immunization/policy/position_papers/influenza/en/)

**Annex 1 – Form for self-monitoring or active monitoring**

<b>Name of the exposed professional</b>															
<b>Telephone</b>															
<b>E-mail</b>															
<b>Health institution</b>															
<b>Work unit in the institution</b>															
<b>Profession/ employment</b>															
<b>Date of last exposure</b>															
				Symptoms (mark all that apply)											
days since last exposure	date	time	temperature	temperature not taken	cough	sore throat	difficulty breathing	chills	runny nose	muscle pain	abdominal pain	nausea or vomiting	diarrhea	none	other
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