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Interim Infection Control Guidance: 2019 Novel Coronavirus

Key considerations are provided below to assist healthcare facility Hospital Epidemiologists, Infection Preventionists, Healthcare Facility Administrators, and Healthcare Providers (HCPs)¹ to prepare for the presentation of a patient with suspect or known Novel Coronavirus Disease (COVID-19)² and to minimize the risk of healthcare-associated transmission. Not all items will pertain to all healthcare settings. For updated information about COVID-19, please see annotated bibliography at the end of this document and the Oregon Health Authority website. (1) This guidance is specific to healthcare settings and is not intended to provide clinical guidance on the diagnosis or treatment of COVID-19.

Implement steps to facilitate quick recognition and isolation of patients with suspect 2019 novel coronavirus infection:

- Early notification. When possible, instruct patients to call ahead and inform clinic or hospital staff when they have symptoms and exposure history (i.e., travel or ill contacts) consistent with suspect COVID-19. Remind patients to adhere to respiratory etiquette and to don a mask upon entry to the facility. Ensure PPE and appropriate room available (see airborne infection isolation room [AIIR] recommendations below) to facilitate rapid triage and to minimize exposure to other patients and providers. (2)
- Signage. Place signs or posters at entryways, requesting that the patient wear a mask and apply hand sanitizer if they exhibit fever, cough, difficulty breathing, or shortness of breath. Request that they notify healthcare providers (HCPs) immediately if, in the prior 14 days, they were in an area experiencing community transmission of 2019 novel coronavirus or if they had close contact (within six feet for 20 or more minutes, cumulatively in the past 14 days) with a COVID-19 case.
- Travel Screening. Screen all patients for international travel within the last 14 days and consider follow-up questions that identify patients who have traveled to an area experiencing community transmission of 2019 novel coronavirus or had contact with a known or suspected COVID-19 case. (2)
- Facilitate rapid triage process. Implement procedures that promote immediate identification and masking
 of those with respiratory symptoms. Screen for recent travel upon check-in and immediately isolate those at
 risk for COVID-19. If an AIIR is not immediately available, identify a separate, well-ventilated space, instruct
 patients to remain at least 6 feet from other individuals, and observe respiratory hygiene, including
 placement of a face mask. (2)

¹ For the purposes of this guidance, healthcare providers (HCPs) are defined as "all persons, paid and unpaid, working in healthcare settings engaged in patient care activities, including: patient assessment for triage, entering examination rooms or patient rooms to provide care or clean and disinfect the environment, obtaining clinical specimens, handling soiled medical supplies or equipment, and coming in contact with potentially contaminated environmental surfaces." (CDC, 2020)

² Name of 2019 novel coronavirus-associated disease as designated by the World Health Organization on February 11, 2020.

- Frontline provider education. Educate providers on the latest information about signs and symptoms, diagnostic testing, and case definitions. (3) Be alert for patients meeting the "persons under investigation" (PUI) definition. (4)
- Interpreter Services. Ensure that interpreter services are readily available to frontline staff. Verify that Mandarin-and Cantonese-speaking interpreters are available.

Implement measures to contain 2019 novel coronavirus:

- Ensure appropriate donning and doffing of personal protective equipment (PPE). HCPs who enter the room of a patient with known or suspected COVID-19 should adhere to standard, contact, and airborne precautions with eye protection. HCPs should wear gloves, a gown, a face shield or goggles that cover the front and sides of the face, and respiratory protection at least as protective as a fit-tested, NIOSH-certified, disposable N95 mask. Powered air purifying respirators (PAPRs) may also be used but must be disinfected after exiting the patient room. HCP should don, doff, and dispose of all PPE in the appropriate sequence. CDC provides guidance and posters for training related to donning and doffing PPE. (2,5,6)
- **Fit testing.** Ensure that appropriate HCPs are medically cleared and fit-tested for respiratory PPE (e.g., N95 masks). See OSHA respiratory training videos for additional information. (2,7)
- Monitor hand hygiene. HCPs should perform hand hygiene before and after all patient contact, after
 contact with potentially infectious materials or contaminated environmental surfaces, and before donning
 and after doffing PPE, including gloves. Hand-hygiene practices among HCPs should be monitored and
 education provided as needed. In healthcare settings, CDC recommends using alcohol-based hand rub that
 contains 60%–95% alcohol or washing hands with soap and water for at least 20 seconds. (2)
- Check airborne infection isolation rooms (AIIRS). Ensure that AIIRs comply with current guidelines and that
 policies are in place for daily verification and documentation of negative-pressure functionality. See CDC
 website for additional information about AIIR guidelines. (2) It is recommended that the evaluation, testing,
 and treatment of a patient with known or suspect COVID-19 should be conducted in an AIIR. If an AIIR is not
 available, please see "Implement strategies for 2019 novel coronavirus containment in outpatient settings"
 section below.
- **Prepare a room-entry log.** Facilities should be prepared to maintain a log of HCPs and visitors who enter the room of any patient with known or suspected COVID-19. (2)
- Identify supply and equipment shortages. Inventory available ventilators, PPE, and respiratory therapy equipment on an ongoing basis. Facilities should coordinate with their local public health authority (LPHA) should shortages arise. (2) CDC has released guidance to support the optimization of PPE supply, particularly as it relates to N95 masks. (10)
- Review visitor policy. HCPs should instruct visitors about appropriate use of PPE. Healthcare facilities should ensure that processes are in place to screen visitors for respiratory illness, to monitor their movement within the facility, and to educate about the risk of COVID-19 and the need to report symptoms of fever or respiratory illness to facility HCPs immediately. Visitors should not be present during procedures likely to generate aerosols. (2) If the event of a PPE shortage, healthcare facilities should consider restricting visitation to patients with known or suspected COVID-19 as appropriate. (10)
- Implement environmental infection control. Dedicated medical equipment should be used for patients with suspect or known COVID-19. Ensure that the environmental cleaning and disinfection policy is being implemented appropriately. EPA-registered, hospital-grade disinfectants with known effectiveness against coronaviruses should be used. (2,8)

- Develop work-exclusion policies for HCPs with recent travel to high-risk areas. As of February 3, 2020, asymptomatic healthcare workers who have been in mainland China in the preceding 14 days should self-quarantine for 14 days afterwards and should avoid congregate settings, including but not limited to the workplace. OHA supports sick and leave policies that facilitate voluntary compliance with quarantine. Mainland China does not include Hong Kong, Macau or Taiwan.
- Develop work-exclusion policies for HCPs with potential exposure to patients with COVID-19. Due to the close and often prolonged contact associated with patient care and the documented risk of healthcare-associated spread of 2019 novel coronavirus, a conservative strategy should be used to prevent transmission from potentially contagious HCPs. CDC has released detailed guidance to assist with risk assessment after potential HCP exposure to COVID-19, work-restriction decisions, and implementation of appropriate monitoring processes to readily identify illness. In general, high-risk exposures include those in which limited source control for the patient could be implemented, and those in which PPE was not used fully and correctly. The public-health response to a confirmed case of COVID-19 will include collaboration between the affected healthcare facilities and public-health officials to determine the best course of action regarding these items. Note that if testing for a PUI is expected to take longer than 72 hours, the patient should be presumed a confirmed case for the purposes of HCP exposure, work exclusion, and monitoring. (11)
- Implement strategies for 2019 novel coronavirus containment in outpatient settings. It is preferred that patients with suspect or known COVID-19 be evaluated in a healthcare setting with a functioning AIIR. If the medical needs of the patient, as determined by their physician or provider, are consistent with outpatient care, the patient may be seen in a private room with the door closed. Rapid check-in and room placement should be used to minimize contact with staff and other patients. The patient should be masked throughout the stay. Aerosol-generating procedures, including the collection of specimens for testing (if testing is approved by public-health officials), require the use of full PPE (gown, gloves, eye protection [goggles or face shield], and a fit-tested N95 mask or PAPR). (2) Contact your LPHA immediately if a patient presents for care who meets the PUI definition or is a suspect case based on exposure history and symptom profile but does not yet meet the case definition.

Develop reporting and communication plans:

- **Develop internal communication plan.** Develop a plan to alert key internal staff (e.g., hospital epidemiologists, infection preventionists, frontline staff, occupational health, laboratory, nursing supervisors, leadership, etc.) promptly about known or suspected cases of COVID-19. (2)
- Develop plan for notifying public health officials. A known or possible case of COVID-19 is immediately
 reportable to your LPHA (see LPHA contact information in Appendix II). Patient movement (including
 interfacility transfers and discharge), 2019 novel coronavirus testing, and discontinuation of transmissionbased precautions should be carried out in consultation with public-health authorities.

Develop training for HCPs and patients:

- **Provide HCP education on transmission-based precautions and PPE guidance.** Ensure that HCPs have access to and are aware of PPE guidance for the care of patients with known or suspected COVID-19 (gloves, gown, eye protection, and respirator [N95 mask or PAPR]). Provide just-in-time training as needed. Provide donning and doffing instructions in clinical-care areas. (2,5,6)
- Educate HCPs to remain home if ill. HCPs should not come to work while ill, and leave policies should reflect this. Stress to HCPs that if they are ill, particularly after recent travel or contact with patients who have or

³ "Congregate settings are public places where close contact with others may occur. Congregate settings include settings such as shopping centers, movie theaters, stadiums, workplaces, and schools and other classroom settings." (CDC, 2020)

- are being evaluated for COVID-19, they should remain at home and notify supervisors and occupational-health services at their facility. (2)
- Inpatient education. Develop education for patients with known or suspected COVID-19. Such education should employ non-stigmatizing language to describe COVID-19 and the goals of PPE use and transmissionbased precautions.
- Outpatient education. If a patient does not have a medical need for hospitalization, and a healthcare facility, in consultation with Oregon Health Authority and the LPHA, determines that a residential setting is appropriate for home care, the patient should be educated regarding the need to restrict activities outside the home, except for seeking medical care, in accordance with CDC interim home care guidance. They should not go to work, school, or public areas, or use public transportation, including taxis or ride-share vehicles. They should be instructed to call ahead before any medical appointments to ensure that HCPs can prepare for their visit. They should be given facemasks for use when in the same room with people, to cover coughs and sneezes, and to perform frequent hand hygiene. Household items should not be shared. (2,9)

Appendix I: Annotated References

1) Oregon Health Authority: Novel coronavirus updates.

www.oregon.gov/oha/PH/DISEASESCONDITIONS/DISEASESAZ/Pages/emerging-respiratory-infections.aspx

Provides Oregon-specific information regarding confirmed-cases, interim Clinical Guidance, and instructions for submitting specimens for Oregon suspect cases.

 Centers for Disease Control and Prevention: Interim infection prevention and control recommendations for patients with known or patients under investigation for 2019 novel coronavirus in a healthcare setting.

www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html

Provides detailed guidance regarding preparation for and management of a known or suspected case of COVID-19 in healthcare settings.

3) Centers for Disease Control and Prevention: Situation Summary.

www.cdc.gov/coronavirus/2019-nCoV/summary.html

Updated regularly, this provides snapshot CDC updates for 2019 novel coronavirus.

4) Centers for Disease Control and Prevention: Interim guidance for healthcare professionals.

www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html

Provides criteria to guide evaluation of patient under investigation for COVID-19 and CDC recommendations for reporting, testing, and specimen collection.

5) Centers for Disease Control and Prevention: Guidance for isolation precautions: preventing transmission of infectious agents in healthcare settings.

www.cdc.gov/infectioncontrol/guidelines/isolation/

Provides description of standard and transmission-based precautions. Provides evidence base for recommendations.

6) Centers for Disease Control and Prevention: Protecting healthcare personnel.

www.cdc.gov/hai/prevent/ppe.html

Provides guidance and posters to educate healthcare providers about how to safely don and doff PPE.

7) Occupational Safety and Health Administration: Respiratory Protection.

www.osha.gov/SLTC/respiratoryprotection/training videos.html

Provides training videos for a variety of components of respiratory protection, including fit testing, medical evaluation, respirator types, and training requirements.

8) Environmental Protection Agency: EPA-approved viral pathogen claims.

www.epa.gov/pesticide-registration/guidance-registrants-process-making-claims-against-emerging-viral-pathogens

Provides guidance to identify effective disinfectant products for use against viral pathogens.

9) Centers for Disease Control and Prevention: Interim guidance for implementing home care of people not requiring hospitalization for 2019 novel coronavirus.

www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html

Provides guidance for healthcare workers and health departments regarding considerations for patients that have or are being evaluated for COVID-19 and may not require hospitalization. Decisions to evaluate persons under investigation or patients with confirmed 2019 novel coronavirus infection should be made in consultation with state and local public health authorities.

10) Centers for Disease Control and Prevention: Strategies for optimizing the supply of N95 respirators.

www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-supply-strategies.html

Discusses engineering (e.g., physical barriers at check-in, AIIRs), administrative (e.g., limiting the number of sick individuals entering facility for non-urgent care, excluding HCP not directly involved in patient

care, bundle care, source control, etc), and PPE-based strategies for optimizing PPE supply with a particular focus on N95 respirators. Provides contingency capacity strategies in response to surge scenarios or prolonged PPE shortages that can be considered in consultation with public health authorities.

11) Centers for Disease Control and Prevention: Interim U.S. guidance for risk assessment and public health management of healthcare personnel with potential exposure in a healthcare setting to patients with 2019-nCoV.

www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

Provides guidance to assist healthcare facilities and public health officials with the assessment of HCP risk after potential exposure to 2019 novel coronavirus. Provides recommendations regarding work-exclusion policies and monitoring that, together, are intended to avoid transmission from potentially contagious HCPs to patients and other healthcare facility staff.

Additional Resources

Washington State Department of Health: Novel Coronavirus Outbreak 2020.

www.doh.wa.gov/Emergencies/Coronavirus

Provides information regarding confirmed cases, guidance for healthcare workers, and instructions for submitting specimens for Washington suspect cases.

Centers for Disease Control and Prevention: Information for Healthcare Professionals.

www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html

Provides CDC interim guidance for healthcare professionals, including guidance for evaluating patients. Also includes preparedness checklists for hospitals and healthcare providers.

Centers for Disease Control and Prevention: Healthcare professional preparedness checklist for transport and arrival of patients potentially infected with 2019-nCoV.

www.cdc.gov/coronavirus/2019-ncov/hcp/hcp-personnel-checklist.html

Brief HCP checklist in preparation for arrival of patients potentially infected with 2019 novel coronavirus.

World Health Organization: Coronavirus.

www.who.int/health-topics/coronavirus

Global summary of coronavirus surveillance and general information regarding coronaviruses. Includes link to technical guidelines.

World Health Organization: Clinical management of severe acute respiratory infection when novel coronavirus infection is suspected.

<u>www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected</u>

Documented intended for clinicians taking care of hospitalized adult and pediatric patients with severe acute respiratory infection (SARI) when COVID-19 is suspected. Not intended to replace clinical judgement.

World Health Organization: Infection Prevention and Control during health care when novel coronavirus infection is suspected.

<u>www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125</u>

Includes strategies for use when infection with COVID-19 is suspected. Adapted from MERS-CoV guidance.

World Health Organization: Novel coronavirus advice for the public.

www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

Information to assist patient education regarding their risk for COVID-19 and steps they can take to protect themselves.

Johns Hopkins Center for Systems Science and Engineering: Wuhan Coronavirus Global Cases

 $\frac{https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html\#/bda7594740fd40299423467b48e}{9ecf6}$

Dashboard to visualize global case counts and deaths at-a-glance. Updated in near real-time and sourced by WHO, CDC, ECDC, China CDC, and two sources of regional case counts in China.



LOCAL PUBLIC HEALTH AUTHORITY NUMBERS IN OREGON

County	General	CD Nurse	CD Fax	Env Health	Animal Bites	After Hours CD
Baker	541-523-8211	General	541-523-8242	General	General	541-523-6415
Benton	541-766-6835	General	541-766-6197	541-766-6841	EH	541-766-6835
Clackamas	503-655-8411	503-655-8411	503-742-5389	503-655-8411	CD	503-655-8411
Clatsop	503-325-8500	General	503-325-8678	General	General	503-791-6646
Columbia	503-397-7247	971-757-4003	503-893-3121	503-397-7247	EH	503-397-7247
				Env Health & Animal Bite Fax 888-204-8568		
Coos	541-266-6700	541-266-6700	541-888-8726	541-266-6720	541-266-6720	541-266-6700
Crook	541-447-5165	General	541-447-3093	541-447-8155	General	541-447-5165
Curry	541-425-7545	541-373-8118	541-425-5557	541-251-7074	EH	541-425-7545
Deschutes	541-322-7400	541-322-7418	541-322-7618	541-388-6566	EH	541-322-7400
Douglas	541-440-3571	541-440-3684	541-464-3914	541-317-3114	EH	541-440-3571
Gilliam*	541-506-2600	General	541-506-2601	541-506-2603	General	541-506-2600
Grant	541-575-0429	General	541-575-3604	General	General	541-575-0429
Harney	541-573-2271	541-573-2271	541-573-8388	541-575-0429	EH	541-573-2271
Hood River	541-386-1115	541-387-7110	541-386-9181	541-387-6885	541-387-7110	541-386-1115
Jackson	541-774-8209	General	541-774-7954	541-774-8206	General	541-774-8209
Jefferson	541-475-4456	General	541-475-0132	General	General	541-475-4456
Josephine	541-474-5325	General	541-474-5353	General	General	541-474-5325
Klamath	541-882-8846	541-882-8846	541-850-5392	541-882-8846	General	541-891-2015
Lake	541-947-6045	General	541-947-4563	General	General	541-947-6045
Lane	541-682-4041	General	541-682-2455	541-682-4480	EH	541-682-4041
Lincoln	541-265-4112	General	541-265-4191	541-265-4127	EH	541-265-4112
Linn	541-967-3888	541-967-3888 x2488	541-924-6911	541-967-3821	EH	541-967-3888
Malheur	541-889-7279	541-889-7279	541-889-8468	541-473-5186	EH	541-889-7279
Marion	503-588-5342	503-588-5621	503-566-2920	503-588-5346	EH	503-588-5342
Morrow	541-676-5421	General	541-676-5652	541-278-6394	General	541-676-5421
Multnomah	503-988-3674	503-988-3406	503-988-3407	503-988-3400	CD	503-988-3406
Polk	503-623-8175	General	503-831-3499	503-623-9237 x1442	EH	503-623-8175
Sherman*	541-506-2600	General	541-506-2601	541-506-2603	General	541-506-2600
Tillamook	503-842-3900	503-842-3912	503-842-3983	503-842-3902	EH	503-842-3900
Umatilla	541-278-5432	General	541-278-5433	General	General	541-314-1634
Union	541-962-8800	541-910-7209	541-963-0520	General	541-910-7209	541-962-8800
Wallowa	971-673-1111	971-673-1111	971-673-1100	971-673-0440	541-426-3131	971-673-1111
Wasco*	541-506-2600	General	541-506-2601	971-673-0440	General	541-506-2600
Washington	503-846-3594	503-846-3594	503-846-3644	503-846-8722	503-846-3594	503-412-2442
Wheeler	541-763-2725	General	541-763-2850	General	General	541-763-2725
Yamhill	503-434-7525	503-434-4715	503-434-7549	General	CD	503-434-7525

^{*}operated jointly as North Central Public Health District