

EMERGING PATHOGEN ALERT

Novel coronavirus (2019-nCoV) infection

The U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) have released guidance documents for the management of patients known or suspected to be infected with a novel coronavirus named 2019-nCoV, which is causing pneumonia with infection associated mortality similar to SARS-CoV and MERS-CoV. The WHO recommendations are based on a 2019 interim guidance document for MERS-CoV until further epidemiologic information is available.

Background Information on 2019-nCoV

- 2019-nCoV is a newly identified coronavirus initially isolated in Wuhan, China on 12.31.2019 with confirmation the virus came from wild animals sold at a market in that province.
- 2019-nCoV is spreading across China with other countries reporting cases including Thailand, South Korea, Taiwan, and Japan.
- Fifteen U.S. cases have now been confirmed (2.14.2020)
- A total of 46,997 confirmed cases have been reported for novel coronavirus (2019-nCoV) globally (WHO-2.13.2020) with over 1300 deaths
- Infection presents with respiratory symptoms, fever, cough, shortness of breath and breathing difficulties.
- Severe cases of infection may result in pneumonia, severe acute respiratory syndrome, sepsis, kidney failure and death.
- The incubation period for 2019-nCoV is unknown at this time but likely as with SARS-CoV and MERS-CoV is 2-7 days (range, up to 14 days).
- Patient risk factors for acquisition of 2019-nCoV have not yet been defined.
- Transmission dynamics of 2019-nCoV have not yet been fully elucidated; Human-to-human transmission is occurring.
- Previous coronavirus outbreaks suggest that environmental surfaces/equipment of infected cases will be contaminated contributing to viral transmission via hands and PPE of healthcare personnel (HCP), and possibly inadequately disinfected shared medical equipment.
- CDC has issued health alert for travelers from Wuhan, China and the U.S. has expanded illness screenings at major airports.





Wuhan

CDC and WHO Interim Infection Prevention and Control Recommendations for Patients Under Investigation (PUI) for 2019-nCoV

Infection Control Recommendations:

Screening and signage

- Place entrance signs at all healthcare facilities alerting patients/visitors of possible disease exposure risk if Wuhan, China travel history and the signs/symptoms of infection with information about who to notify of their exposure/symptoms.
- Include messaging about possible exposure based on travel history and the signs and symptoms of 2019-nCoV in all telephone contacts regarding patient appointments.
- Patients with clinical features of illness should be evaluated for epidemiologic risk. (https://www.cdc.gov/coronavirus/2019-nCoV/clinical-criteria.html)
- Implement respiratory hygiene etiquette (i.e., immediate use of mask and proper disposal of tissues); use of hand sanitizer.

Triage

- Have appropriate personal protective equipment (PPE) (N95 respirators, face shields, gowns and gloves) immediately available for all healthcare personnel (HCP) in the ERs and ambulatory settings.
- Place Patients Under Investigation (PUI) on Standard, Contact and Airborne isolation precautions plus eye protection (i.e., use of a face shield or eye googles) in an airborne isolation room (if available), or negative pressure private room (ideally with HEPA unit in the room).

Inpatient care

• Place PUI on Standard, Contact and Airborne isolation precautions plus use of face shield or eye goggles in an airborne isolation room; limit visitors; care by HCP trained in use of powered air purifying respirators (PAPRs) or fit-tested NIOSH-certified disposable N95 filtering facepiece respirator and proper donning/doffing of PPE.

NOTE: The appropriate donning and doffing of PPE by HCP plays a critical role in preventing the spread of coronaviruses as survival of these viruses on gloves and fabric has been demonstrated.

- Environmental services staff should adhere to the PPE recommendations while performing routine, daily or terminal cleaning of rooms occupied by PUI for 2019-nCoV.
- Initiate a log of all HCP providing care; use of only dedicated HCP; HCP to self-monitor for symptoms.

Clinicians should continue to use EPA-registered disinfectants and alcohol-based hand sanitizer in accordance with these guidance documents. Previously identified novel coronaviruses that have resulted in human acute respiratory syndromes (e.g. SARS, MERS) were found to contaminate environmental surfaces and to survive for days to weeks. Disinfection of environmental surfaces and medical equipment with an EPA-registered disinfectant is critical to disrupt viral transmission. Ensure that environmental cleaning/disinfection procedures are followed according to the manufacturer's instructions for use.



PDI offers several EPA-registered surface disinfectant products that have a label claim against a strain of human coronavirus (Strain 229E [ATCC VR-740]):

SUGGESTED PDI PRODUCTS





Sani-Prime[®] Spray & Wipes

Sani-24® Spray



Super Sani-Cloth® Wipes



Sani-Cloth[®] Bleach Wipes



Sani-Cloth[®] AF3 Wipes

Our products qualify for emerging viral pathogen claims per EPA's Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens not on EPA-Registered Disinfectant Labels' when used in accordance with the appropriate use directions. Currently, the 2019 Novel Coronavirus has not been available for testing. These products have demonstrated effectiveness against a virus similar to 2019-nCoV on hard, nonporous surfaces. Therefore, these products can be used against the 2019-nCoV when used in accordance with the directions for use against human coronavirus on hard, nonporous surfaces.

Utilizing **Tru-D**[®] **SmartUVC** is an added layer of disinfection for surfaces. While there is no peer-reviewed literature that specifically focuses on the efficacy of UVC devices against this unique strain of coronavirus, Tru-D was designed to combat bacteria, viruses, spores and fungi.



At PDI, we strive to include the most relevant epidemiologically important pathogens on our disinfectant product labels and continue to monitor for emerging pathogens to be included in future product label changes. Please don't hesitate to contact your PDI or Tru-D[®] SmartUVC sales representative or PDI Clinical Science Liaison with any additional questions. Thank you.

If you have any additional questions, please visit the CDC or WHO dedicated websites on 2019 nCoV:

- https://www.cdc.gov/coronavirus/2019-nCoV/guidance-hcp.html
- https://www.who.int/emergencies/diseases/novel-coronavirus-2019



Source: Centers for Disease Control and Prevention and World Health Organization