EPC Electromechanical Contracting Company

Coronavirus Outbreak Contingency Plans

COVID-19 Coronavirus

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Interim Infection Prevention and Control Recommendations for PESCO Power Plant

Executive Summary

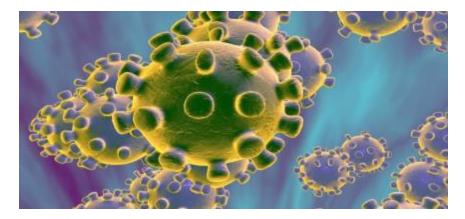
In December 2019, China reported cases of a viral pneumonia caused by a previously unknown pathogen that emerged in Wuhan, a city of 11 million people in central China. The initial cases were linked to exposures in a seafood market in Wuhan where a large range of live animal and animal products were sold. The pathogen was identified as a novel (new) coronavirus (recently named Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)), which is closely related genetically to the virus that caused the 2003 outbreak of Severe Acute Respiratory Syndrome (SARS). SARS-CoV-2 causes the illness now known as Coronavirus disease 2019 (COVID-19). Currently, there is no specific treatment (no vaccine and no antiviral) against the new virus.

Due to heightened global concerns around the pandemic potential of COVID-19, following a meeting of the World Health Organization (WHO) International Health Regulations Emergency Committee, the Director-General declared the outbreak of COVID-19 a Public Health Emergency of International Concern on 30 January 2020.

PESCO is prepared and has Infection Prevention and Control system to monitor the site people and Infection control. All areas people of the site are well informed and actively engaged in the emergency response.

PESCO has taken a precautionary approach in line with preparedness and response guidance for a pandemic, working collaboratively with whole of PESCO GUIDELINE to implement strategies to control disease Infection and transmission through strong measures and communication activities.

Information on Coronavirus Disease (COVID-19)



The symptoms of Coronavirus Disease (COVID-19), which can include fever and cough, are similar to other respiratory infections, including influenza.

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What you need to know

- Proper hand washing, covering your mouth and nose when coughing or sneezing and staying home when you're sick is the best protection
- If you have returned from the Hubei province (including Wuhan city) in China, monitor for symptoms and avoid contact with others for 21 days after leaving Hubei province
- If you have health concerns, please contact the site doctor.

How is the virus spread

- Coronaviruses are mainly transmitted by large droplets spread through coughing, sneezing and kissing and also contact with infected secretions for example on door handles.
- In addition to respiratory secretions, other coronaviruses have been detected in blood, faeces and urine.
- COVID-19 can pass from animals to humans as well as human to human. The animal source is not yet know.
- Most of the people infected are those that work at live animal markets, family members and health care workers looking after infected people.
- Unlike SARS, this coronavirus can spread before a person shows any symptoms (asymptomatic). This makes controlling exposure and spread much harder.

How is it treated

- There is currently no effective medicine to destroy the virus. Antivirals do exist but are not particularly effective.
- Medical staff will provide support to maintain oxygenation of blood and relieve fever and pain.

Is there a vaccine?

- There isn't currently a vaccine for any coronavirus as most cause only mild illness.
- Scientists started work on a vaccine for the SARS virus but the outbreak ended before the work was completed. This vaccine may or may not be useful for preventing illness from the Wuhan coronavirus.
- Many research groups and companies are urgently working on a vaccine.

Respiratory infection caused by Coronavirus Disease

Illnesses associated with the new Coronavirus Disease, named COVID-19, are similar to several respiratory illnesses and include fever, dry cough, sore throat and headache. Most cases are considered mild to moderate with a subset experiencing more severe illness with shortness of breath and difficulty breathing. Deaths have been reported among about two to four per cent of detected cases in China although it is likely that the actual risk of such severe outcomes is lower given milder cases are less likely to be detected.

Cases were initially linked to exposure to live animals at a seafood market in Wuhan City but the substantial increase in cases thereafter is due to human-to-human transmission of the virus. Other respiratory viruses can be spread from a cough or sneeze or from touching something an infected person has touched and then touching your eyes, mouth or nose. The main ways and efficiency of COVID-19 spread still require better understanding.

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Health authorities in China have taken prevention and control measures to prevent the spread of infection and are continuing to investigate the source of COVID-19. The risk to Canadians is considered low at this time, however, the threat is being taken seriously.

Signs and symptoms

If you have been travelling and you become ill or become ill after you return home, tell your health care provider about recent travel and your symptoms. You should also tell your provider if you had close contact with a sick person or had another high-risk exposure such as direct contact with animals.

Reported signs and symptoms include:

- Fever
- Coughing
- Difficulty breathing
- Pneumonia in both lungs.

Operating Mechanism

On the morning meeting, prior to the start of the daily work, all key staff will be briefed on the measures for prevention, detection, and address of infectious diseases. We will monitor PESCO staffs' health and remind them of effective health and hygiene habits, including coughing and sneezing etiquette, and proper hand-washing.

Strategies for Preventing the Spread of Infection



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Overview of the Site Approach

Background

Infection control instructions including administrative rules and controls, environmental hygiene, correct work practices, and appropriate use of personal protective equipment (PPE) are all in place to prevent infections.

PESCO ensures that their personnel are correctly trained and capable of implementing infection control procedures and requirements.

Guidance and posters are based on the currently information available about COVID-19 related to disease severity. This cautious approach will be refined and updated as more information becomes available and as response needs change in the PESCO HSE group requirements and instructions.

1. Minimize Chance for Exposures

A. Self-imposed quarantine process shall be applied to the following categories:

Category	Clinical features & Epidemiologic Risk
Category I	A history of travel from Mainland China, Hong Kong, South Korea, Iran, Italy or Japan
Category II	Fever (person feels warm to the touch, gives a history of feeling feverish, or has an actual measured temperature of 38° C or higher) that has persisted for more than 48 hours
	OR
	Fever (body temperature ≥ 37.3 °C) AND Developed the following signs/ symptoms: • Persistent cough • Breathing difficulties • Appears obviously unwell
	OR Had a close contact** with a laboratory-confirmed 2019-nCoV patient within 21 days of symptom onset.
Category III	A history of travel to affected countries with confirmed case of coronavirus.

- B. Any of employees that fall into Category I and Category II shall be self-imposed quarantine, working at home Twenty One (21) consecutive days effective from the date of arrival to home country (for Category I) or upon developing any symptoms (for Category II).
- C. Any employees who have travelled to the other affected countries* (Category III), he/ she may resume work

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in isolated space in based office and avoiding company event/activities, HOD is responsible to observe and monitor his/ her health condition for at least twenty one (21) days upon returned to office.

D. During the 21 days self-Imposed quarantine period, the relevant employees shall carry out self-monitoring of their health condition and report daily health condition to Group Safety.

Note: *Please refer to update from ArcGIS Online for Wuhan Coronavirus Visualization Map (2019-nCoV) Global Cases. <u>https://bit.ly/2NXH2tP</u> for affected countries with confirmed case

2. Adherence to Standard and Contact Precautions, Including the Use of Eye Protection:

Attention should be paid to training on correct use, proper donning (putting on) and doffing (taking off), and disposal of any PPE. The full description is provided in the "Interim Guidance Employee Self Imposed Quarantine and Health Monitoring".

• Hand Hygiene

All PESCO staff, contractors and visitors, regardless of specific exposure risks, it is always a good practice to:

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable.
- Use an alcohol-based (Hand hygiene Sanitizer) hand rub with at least 60% alcohol. Always wash hands that are visibly soiled. All site people should perform hand hygiene using Sanitizer before and after all object contact, material, and before putting on and upon removal of PPE, including gloves. Units are readily available in 6 different locations.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Avoid close contact with people who are sick.
- PESCO has developed this interim guidance to help prevent worker exposure to COVID-19.











:

The back of the fingers against the opposite palm with the fingers gribbing each other.





Rotating wash of the right thumb with left palm and opposite.

Right palm above the left back of the hand and left palm above the right back of the hand.



Rotating wash of right palm with left hand fingers closed and opposite.



Palm against palm with interlaced fingers.



Rotating wash of both wrists.

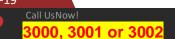
Regardless of specific exposure risks, following good hand hygiene practices can help people stay healthy.

• Personal Protective Equipment (PPE)

PESCO HSE department selected appropriate PPE and provide it to PESCO people in accordance with PESCO's PPE standards. PESCO staff and sub-contractors received training on and demonstrate an understanding of when to use PPE; what PPE is necessary; how to properly don, use, and doff PPE in a manner to prevent self-

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contamination; how to properly dispose of or disinfect and maintain PPE; and the limitations of PPE. Any reusable PPE must be properly cleaned, decontaminated, and maintained after and between uses. PESCO have instructions describing a recommended sequence for safely donning and doffing PPE:

- Gloves
 - Site doctors to perform hand hygiene, then put on clean, non-sterile gloves upon entry into the clinic room area or site area. Change gloves if they become torn or heavily contaminated.
 - Remove and discard gloves when leaving the clinic room or care area, and immediately perform hand hygiene.

Respiratory Protection

- Use respiratory protection (i.e., a respirator mask) that is at least as protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator before entry into the clinic room or as needed.
- Disposable respirators should be removed and discarded after use. Perform hand hygiene after discarding the respirator.
- If reusable respirators (e.g., powered air purifying respirator/PAPR) are used, they must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use

• Respiratory protection masks are readily available in 2 different types:

- Surgical Mask (1350 piece)
- N95 Mask (1300 piece)

Eye Protection

Put on eye protection (e.g., goggles, a disposable face shield that covers the front and sides of the face) upon entry to the clinic room or site area. Remove eye protection before leaving the clinic room or site area. Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use.

Close contact

- Health care associated exposure, including providing direct care for novel coronavirus patients, working with health care workers infected with novel coronavirus, visiting patients or staying in the same close environment of a novel coronavirus patient.
- Working together in close proximity or sharing the same classroom environment with a with novel coronavirus patient.
- $_{\odot}$ Traveling together with novel coronavirus patient in any kind of conveyance.
- \circ Living in the same household as a novel coronavirus patient.

3. Manage Visitor Access and Movement within PESCO site:

Ensure site policies and practices are in place to minimize exposures to respiratory pathogens including COVID-19. Measures were implemented before visitor's arrival, upon arrival, and throughout the duration of the visitor's presence in the site.

• Before visitor Arrival

 All PESCO visits (including internal and external visitors), prior authorization is required and shall be directed to President & Executive Director for approvals with immediate effect. All visitors' information is submitted regularly to PED Office for any internal and external visits and PED Office will compile and submit the log book to PED on weekly basis.

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- Alternative mechanisms for visitor interactions, such as video-call applications on cell phones or tablets should be explored.
- Restrict visitors from entering the site of known or suspected COVID-19 infected countries.
- PESCO established procedures for monitoring, managing and training visitors.

• Upon Arrival and During the Visit

- Measuring of body temperature shall be conducted by security guards when entering into the security building. Expatriates shall self-measure their body temperature. If the body temperature measured is ≥ 37.3°C, one shall be prohibited from entering the site.
- Screening visitors for symptoms of respiratory illness before entering the PESCO plant.
- PESCO Site shall evaluate risk to the health of the visitor (e.g., visitor might have underlying illness putting them at higher risk for COVID-19) and ability to comply with precautions.
- PESCO Site should provide instruction, before visitors enter sites' buildings or rooms, on hand hygiene, limiting surfaces touched, and use of PPE according to current PESCO site policy while in the site's area, building or rooms.
- PESCO should maintain a record (e.g., log book) of all visitors who enter PESCO site and their health condition.
- Visitors should be instructed to limit their movement within the PESCO plant area.
- Expatriates visitors, when scheduling appointments, the site security to take appropriate preventive actions (e.g., wear a facemask upon entry to site gate, follow site access procedures, then the security guard will accompany the site visitor to the site clinic to be checked by the site doctor. If they have symptoms of any respiratory infection (e.g., cough, runny nose, fever), limit contact with others as much as possible to prevent from spreading the virus and effected visitors to be evacuated immediately. Expatriates visitors such as (e.g., EVB, Toshiba, TUV, TSV and IMI contractors) should by monitored by the site doctor on a daily basis and should be advised to report any signs and symptoms of illness to their work group leader (WGL) for a period of at least 14 days after the date they enter the site.
- All visitors should follow respiratory hygiene and cough etiquette precautions while in the common areas of the site.

4. Identify and Isolate Suspected Cases

- In PESCO where exposure to the COVID-19 may occur, prompt identification and isolation of potentially infectious individual is a critical first step in protecting staff, contractor's workers, visitors, and others at the worksite.
 - Immediately isolate people suspected of having COVID-19. For example, move potentially infectious people to a location away from site people (staff, contractors, and other visitors) to isolation rooms (Quarantine room) and close the doors.
 - Take steps to limit spread of the person's infectious respiratory secretions, including by providing them a
 facemask and asking them to wear it, if they can tolerate doing so. Note: A surgical mask on a patient or
 other sick person should not be confused with PPE for a worker; the mask acts to contain potentially
 infectious respiratory secretions at the source (i.e., the person's nose and mouth).
 - Isolate people suspected of having normal illness separately from those with confirmed cases of having symptoms of respiratory illness to prevent further transmission.
 - Restrict the number of personnel entering isolation areas (Quarantine room), including the room of a
 patient with symptoms of respiratory illness "suspected COVID-19".
 - Protect workers in close contact* with the sick person by using additional engineering and administrative control, safe work practices and PPE.

*CDC defines "close contact" as being about six (6) feet (approximately two (2) meters) from an infected person or

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within the room or care area of an infected patient for a prolonged period while not wearing recommended PPE. Close contact also includes instances where there is direct contact with infectious secretions while not wearing recommended PPE. Close contact generally does not include brief interactions, such as walking past a person.

5. Implement Engineering Controls

- Consider engineering controls to reduce or eliminate exposures of site people from infected individuals (symptoms of respiratory illness). Examples of engineering controls include Quarantine Room and physical barriers or partitions to prevent and control the epidemic. PESCO Equipped a room specifically for use in isolating the patient with symptoms of respiratory illness "suspected COVID-19".
- Quarantine room (triage area) at PESCO: A room dedicated to quarantine and far from the rest of the station's people, as it is quite far from the site areas where this room is located in a region next to the site's sub-gate and the closest building to that room is located 30 meters away and 40 meters away from the site gate. To avoid contact between the sick person and the rest of the site's members until the person leaves the site





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6. Monitor and Manage III Personnel

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- If an employee is confirmed to have close contact with the suspected case, the employee shall immediately report to the head of Leading Group Office, and isolate himself as required. The Company's human resources department shall be responsible to monitor health condition of the employee.
- Movement and monitoring the quarantined individual with exposure to symptoms of respiratory illness should be made in consultation with site doctor and preparing the transportation to the sick person.
- PESCO site should comply with local country sick leave policies for sick person (symptoms of respiratory illness) consistent with Interim Guidance Employee Self Imposed Quarantine and Health Monitoring.



7. Train and Educate of PESCO Personnel

- Train and educate all PESCO site personnel, on preventing infection with the new virus (COVID-19), to all site
 personnel, including employees, sub-contractor workers and visitors, including refresher training about the
 sources of exposure to the virus, the hazards associated with that exposure, and appropriate workplace
 protocols in place to prevent or reduce the likelihood of exposure. Training should include information about
 how to isolate individuals with suspected or confirmed COVID-19 or other infectious diseases, and how to
 report possible cases. Training must be offered during scheduled work times.
- Workers required to use PPE must be trained. This training includes when to use PPE; what PPE is necessary; how to properly don (put on), use, and doff (take off) PPE; how to properly dispose of or disinfect, inspect for damage, and maintain PPE; and the limitations of PPE.
- PESCO site personnel, including employees, sub-contractor workers and visitors must be medically cleared, trained, and fit tested for respiratory protection device use (e.g., N95 filtering face piece respirators). OSHA has a number of <u>respiratory training videos</u> located at the Server share area.
- Ensure that site doctors are educated, trained, and have practiced the appropriate use of PPE prior to caring for a patient, including attention to correct use of PPE and prevention of contamination of clothing, skin, and environment during the process of removing such equipment.

8. Implement Environmental Infection Control

- Dedicated medical equipment should be used for sick person (symptoms of respiratory illness).
- All non-dedicated, non-disposable medical equipment used at clinic should be cleaned and disinfected according to manufacturer's instructions and best practice.
- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly.
- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean to frequently touched surfaces or objects for appropriate contact times are appropriate for COVID-19, including those building rooms and site areas in which activities are performed.
- Management of food service (catering), and medical waste should also be performed in accordance with routine procedures.

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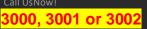




• Detailed information and training on environmental infection control should be provided by the SHE department to all concerned parties.

9. Establish Reporting within PESCO plant and to PESCO HQ Office

- Implement mechanisms and policies that promptly alert key PESCO site staff including infection control, epidemiology information, clinic facility, and frontline staff about known or suspected COVID-19.
- Communicate and collaborate with public health authorities.
 - In case of promptly notify local public health authorities of sick person (symptoms of acute respiratory illness) with suspected COVID-19. PESCO sites should designate specific persons within the PESCO Headquarter who are responsible for communication with public health officials and dissemination of information to PESCO Headquarter.





We use Disinfectants & sanitizing which are effective against the Coronavirus

GENERAL

Sanitizer Unit

Surfaces and objects are touched often

Use an alcohol-based (Hand hygiene Sanitizer) hand rub with at least 60% alcohol. Always wash hands that are visibly soiled. All site people should perform hand hygiene using Sanitizer before and after all object contact, material, and before putting on and upon removal of PPE, including gloves. Units are readily available in 6 different locations.





Daily sanitizing of surfaces and objects that are touched often, such as bathrooms, staircase, water coolers, desks, countertops, doorknobs, tap handles.

Get it done right the first time.

"Be smart, be safe, be sure".

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Clinic Room

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Ways to prevent the disease **PROTECT YOURSELF AND OTHERS**



AVOID travel to Wuhan due to evolving COVID-19 situation.

- > If you are travelling overseas:
 - DON't, go near live animals, including poultry & birds,
 - DON't, eat raw and undercooked meats,
 - DON't, be in crowded places and around people who are unwell,
 - DO, wash hands frequently with soap,
 - DO, wear a mask if you have a cough or runny nose,
 - DO, cover your mouth with a tissue paper when coughing or sneezing,
 - **DO**, see a doctor if you feel unwell.
- > Do not travel if you develop any illness symptoms.
- > Use hand sanitizer if soap and water are not available.
- > Stay home from work. Take precautions to prevent the spread of infection.
- > Monitor the body temperature, Even you did not suffer from any disease.

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Disinfectant PPE effective against COVID-19

ASK FOR A MASK

All PESCO People required to use PPE must be trained. This training includes when to use PPE; what PPE is necessary; how to properly don (put on), use, and doff (take off) PPE; how to properly dispose of or disinfect, inspect for damage, and maintain PPE; and the limitations of PPE.

PPE available at PESCO Site against COVID-19



It has become imperative to take additional measures during the annual outage of SG. Where the site is not limited to individuals only, but there are a number of participants in the outage (internal and external), some of them come from external countries where the disease actually appeared





- Sub-Contractors' vehicles are parked outside the power station.
- Sub- contractor has to walk through the Security Guard House.
- Screening of sub-contractors shall be conducted at the Security Guard House on daily basis before entering the plant.
- Before entering the plant, body temperature is taken by the Security Guard, who wears a mask. Body temperature will be taken again when leaving the plant at the end of the day. All body temperature readings are recorded.
- Security Personal Data Form shall be filled by individual to declare that they are free from COVID-19 symptoms, and shall be reviewed by the Security Guard. Any abnormalities, such as body temperature > 37.3°C, the Security Guard will deny entry to the individual and report immediately to the SHE Manager who will then inform the HOD and PSM.
- PESCO Equipped a room specifically for use in isolating the patient with symptoms of respiratory illness "suspected COVID-19". Quarantine room 40 meters away from the security building.
- People should perform hand hygiene using Sanitizer before leaving the security gate.



24 hr



Security guard will accompany the site visitor to the site clinic to be checked by the site doctor. Currently there are 14 Security guards covering the 24 hours period in a day at they are sighted in various locations around the power plant site.

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