

COVID -19 PRIVATE SECTOR RE-OPENING GUIDELINES

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Disclaimer: This guideline document, developed for the PR-BEOC and the PR Economic Advisory Board, is intended to provide general guidance on COVID-19 risk factors and non-pharmaceutical interventions measures as described in the available Centers for Disease Control and Prevention (CDC) Guidelines, PROSHA Guidelines and World Health Organization (WHO) public documents as of April, 21 2020. This document is not intended to provide medical guidelines or address medical concerns or specific risk circumstances, and is not a substitute for professional medical advice, diagnosis or treatment. It is intended for informational purposes only, and does not provide any guarantee of outcome. The information contained within is gathered and shared from reputable sources; however, DGF Consulting Group is not responsible for errors or omissions in reporting or in any conclusion put forth by any of such sources. This document is not intended to provide specific recommendations for the PR-BEOC or the PR Economic Advisory Board to follow. Due to the dynamic nature of infectious diseases, DGF Consulting Group, its parent company, affiliates, subsidiaries and other officers, directors, and employees cannot be held liable for the use, reference to, or reliance on the guidance provided. We strongly encourage PR-BEOC and the PR Economic Advisory Board, the Business Community and the Organizations in Puerto Rico to continuously seek the assistance of a professional to adopt, and adopt this guidelines to its business, as well as to continuously seek additional safety, medical, and epidemiologic information from credible sources such as the CDC, Puerto Rico Department of Health, PROSHA, OSHA and the WHO.

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COVID -19 PRIVATE SECTOR RE-OPENING GUIDELINES

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EXECUTIVE SUMMARY

On March 12, 2020, the Governor of Puerto Rico declared an emergency state related to the imminent impact of Coronavirus in the Island.¹ Since March 12th, the Governor of Puerto Rico has issued several Executive Orders limiting the economic activity to slow and stop transmission, prevent outbreaks, and delay the spread of the virus. On March 23, 2020, a Health Advisory Board, namely the "Health Task Force", was activated by Executive Order 2020-026 with the responsibility of performing studies, investigations, and development of strategic plans to manage the emergency and the coordinated response to the pandemic. On the same date, an Economic Advisory Board, namely the "Economic Task Force", was formally activated by the Governor of Puerto Rico utilizing the governance provided by the PR-Business Emergency Operations Center (PR-BEOC) in accordance to the requirements of the Joint Operational Catastrophic Incident Plan (JOCIP). The Economic Task Force integrated all of the PR-BEOC leaders that represent the Critical Infrastructure Sectors as defined by the Department of Homeland Security, economists, and industry leaders representing several associations. The role of the "Economic Task Force" is to provide recommendations to minimize COVID-19 impact on the economic activity of Puerto Rico.

As recommended by the WHO guidelines, all government plans should aim to minimize the impact on health systems, social services, and economic activity. To that intent, the "Economic Task Force" has developed a phased re-opening model that considers critical economic indicators and health system capacity criteria. The model is intended to provide guidance for the orderly re-opening of the economic sectors without affecting the virus spread nor the health system capacity. Recognizing that all sectors are different and that a one fits all model is not sustainable, the "Economic Task Force" approved the development and distribution of guidelines that serve as a template for individual business plans in preparation for re-opening or for resuming physical or virtual operations when, by Executive Order of the Governor of Puerto Rico, a particular economic sector re-opening is granted.

The purpose of this document is to provide guidance for the assessment of risks of SARS-CoV-2 transmission in businesses in order to identify and implement mitigation measures to reduce risks to employees and customers. The model that supports the phased re-opening of the businesses, is based on the ability of the private sector to implement measures that reduce the transmission, thereby not affecting the Puerto Rico Health System capacity to provide adequate care to COVID-19 positive cases. It is imperative that businesses maintain the most rigorous controls to minimize the transmission of the virus among employees and clients.

DGF Consulting Group acknowledges and thanks the contribution of all the reviewers in the revision of this guidelines.

¹Boletín administrativo Núm. 02-2020-020, Orden Ejecutiva de la Gobernadora de Puerto Rico Wanda Vázquez Garced, para declarar un Estado de Emergencia ante el inminente Impacto del Coronavirus (COVID-19) en Nuestra Isla. x), Available from: <https://www.estado.pr.gov/en/executive-orders/>

Disclosures

This guidance is not a standard or regulation, and it creates no new legal obligations. It contains recommendations, as well as descriptions of mandatory safety and health standards. The recommendations are advisory in nature, informational in content, and are intended to assist employers in providing a safe and healthful workplace.

Re-Opening Criteria

Economic Sectors re-opening sequence will be granted by the Governor of Puerto Rico, by means of an Executive Order, considering recommendations provided by the Economic Task Force and the Medical Task Force.

Re-opening of any company in Puerto Rico, requires the development and implementation of a COVID-19 Business Re-Opening Plan describing the risk evaluation process followed and the non-pharmaceutical interventions implemented.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico or his designee to ensure there is a mechanism in place to update the COVID-19 Business Re-Opening Plan as new OSHA, PROSHA, or CDC guidelines are published.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico or his designee to ensure there is a protocol to make certain that all employees are properly trained and understand the COVID-19 Business Re-Opening Plan developed by the Company.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico or his designee to maintain a list of all the active employees.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico or his designee to submit a report providing the number of active employees, the number of COVID-19 positive results of any active employee, the number of quarantined employees, and any other relevant information in the frequency established by the Department of Economic Development and Commerce. For the purposes of the report an active employee is an employee that is not working from home.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to submit a COVID-19 Self-Certification Notification to the Puerto Rico Occupational Safety and Health Administration via e mail, using PROSHA Form FC-101 "Auto Certificación Patronal – Plan Patronal de Control de Exposición a COVID-19".

Re-opening of any Company will be effective immediately after the submission and completeness of the COVID-19 Self-Certification Notification to the Puerto Rico Occupational Safety and Health Administration (PROSHA) .

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It is the responsibility of the Company's highest-ranking official based in Puerto Rico to approve the Business Re-Opening Plan.

Guiding principles

Each economic sector is unique; therefore, appropriate mitigation strategies will vary based on the level of community transmission, characteristics of the organization , their employees, customers, and the capacity to implement protection and mitigation strategies.

Each Company or Organization that intends re-opening must assess all aspects of the working spaces that might be impacted, including employees most vulnerable to severe illness and those that may be more impacted socially or economically, and select appropriate actions.

Each Company or Organization must identify exposure risk and mitigation strategies that can be scaled up or down depending on the evolving local, municipal or island-wide situation.

When developing non-pharmaceutical interventions measures, employers should identify ways to ensure the safety and social well-being of employees that may be especially impacted by mitigation strategies, including individuals at increased risk of severe illness.

Activation of a company's emergency plans is critical for the implementation of non-pharmaceutical interventions measures related to COVID-19. These plans may provide additional authorities and coordination needed for interventions to be implemented.

Depending on the level of community spread of COVID-19, the company may need to implement mitigation strategies for employees to identify cases and conduct contact tracing within the organization.

OSHA General Guidance ²

Each Company shall consider the following steps to reduce Active Workers' risk of exposure to COVID-19:

- 1. Develop a COVID-19 Preparedness and Response Plan
2. Implement Basic Infection Prevention Measures
3. Develop Policies and Procedures for Prompt Identification and Isolation of Sick People, if Appropriate
4. Develop, Implement, and Communicate about Workplace Flexibilities and Protections
5. Implement Workplace Controls

² Guidance on Preparing Workplaces for COVID-19, Available from: https://www.osha.gov/Publications/OSHA3990.pdf

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DISCLOSURE

This document is internal guidance developed for the Private Sector to establish requirements for the management and protection of the employees. It is not a standard or regulation, imposed or mandated by any regulatory agency, local or federal, and it creates no new legal obligations. It contains recommendations as well as descriptions of mandatory safety and health standards. The recommendations are advisory in nature, informational in content, and are intended to assist companies in providing a safe and healthful workplace for the employees and the customers. Employers are recommended to consult their occupational safety and legal advisors in order to devise protocols for workplace safety tailored to their particular needs.

INTRODUCTION

In December 2019, an unprecedented outbreak of pneumonia of unknown etiology emerged in Wuhan City, Hubei province of China. A novel coronavirus was identified as the agent responsible for the outbreak. On 30th January 2020, the World Health Organization (WHO) declared the Chinese outbreak to be a Public Health Emergency of International Concern, posing a high risk to countries with vulnerable health systems. On February 11, 2020, WHO termed the virus that causes the coronavirus disease of 2019 as COVID-19. On March 11th, 2020, as a result of the 13-fold increase number of cases outside of China and the triplication of the number of affected countries, WHO characterized COVID-19 as a pandemic.³

A pandemic is a global outbreak of disease. Pandemics happen when a new virus emerges to infect people and can spread between people sustainably. Because there is little to no pre-existing immunity against the new virus, it spreads worldwide.⁴ For this to happen, the virus must be able to infect people and, the spread of person to person must be efficient and sustained.⁵

On March 19, 2020, WHO⁶ alerted all countries to prepare to respond to different health scenarios recognizing that a one fits all approach for COVID-19 was not feasible. WHO recommendations reinforced the need for countries to assess their risk and implement necessary measures at the appropriate scale to reduce both the COVID-19 transmission and the economic, public, and social impacts. WHO recommended that all countries preparedness and response plans for COVID-19 should aim to:

- Slow and stop transmission, prevent outbreaks, and delay spread
- Provide optimized care for all patients, especially the seriously ill

³ WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020 | Available from: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--11-march-2020>

⁴ CDC Coronavirus Disease 2019 (COVID-19), Situation Summary | Available from: <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html>

⁵ PLANTILLA Plan de Continuidad de Operaciones ante una Pandemia para agencias, organizaciones y negocios, Departamento de Salud de PR, Rev Feb 2020

⁶ Critical preparedness, readiness and response actions for COVID-19, Interim Guidance, World Health Organization, 19 March, 2020 (WHO/2019m-cov/CommunityActions/2020.3). Available from: <https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19>

- Minimize the impact of the epidemic on health systems, social services, and economic activity

On April 16, 2020, the United States President released guidelines for states, cities, and countries to start easing Coronavirus restrictions. The guidelines, presented in phases, define the individuals and the employers' responsibilities, requiring the development and implementation of appropriate policies in accordance with Federal, State and local regulations and guidance, and informed industry best practices regarding: social distancing, protection equipment, temperature checks, sanitation of common and high-traffic areas, disinfection and business travel

Puerto Rico:

On March 12, 2020, the Governor of Puerto Rico declared an emergency state related to the imminent impact of Coronavirus in the Island.⁷ Since March 12th, the Governor of Puerto Rico has issued several Executive Orders limiting the economic activity to slow and stop transmission, prevent outbreaks, and delay the spread. On March 23, 2020, a Medical Advisory Board, namely the "Medical Task Force", was activated by Executive Order 2020-026 with the responsibility of performing studies, investigations, and development of strategic plans to manage the emergency and the coordinated response to the pandemic. On the same date, an Economic Advisory Board, namely the "Economic Task Force", was formally activated by the Governor of Puerto Rico utilizing the governance provided by the PR-Business Emergency Operations Center (PR-BEOC) in accordance to the requirements of the Joint Operational Catastrophic Incident Plan (JOCIP). The Economic Task Force integrated all of the PR-BEOC leaders that represent the Critical Infrastructure Sectors as defined by the Department of Homeland Security economists, and industry leaders representing several associations. The role of the "Economic Task Force" is to provide recommendations to minimize COVID-19 impact on the economic activity of Puerto Rico.

As recommended by the WHO guidelines, all government plans should aim to minimize the impact on health systems, social services, and economic activity. To that intent, the "Economic Task Force" has developed an economic re-opening model that considers critical economic indicators and health system capacity criteria. The model is intended to provide guidance for the orderly re-opening of the economic sectors without affecting the spread nor the health system capacity. Recognizing that all sectors are different and that a one fits all model is not sustainable, the "Economic Task Force" approved the development and distribution of guidelines that serve as a template for individual business re-opening plans in preparation for opening or for resuming physical or virtual operations when, by Executive Order of the Governor of Puerto Rico, a particular economic sector re-opening is granted.

⁷ Boletín administrativo Núm. 02-2020-020, Orden Ejecutiva de la Gobernadora de Puerto Rico Wanda Vázquez Garced, para declarar un Estado de Emergencia ante el inminente Impacto del Coronavirus (COVID-19) en Nuestra Isla. x), Available from: <https://www.estado.pr.gov/en/execute-orders/>

OBJECTIVES

During a pandemic, employers play an essential role in protecting employee health and limiting negative impacts on the economy and society. This document provides guidance for businesses to re-open their operations and maintain their essential services and operations during and after the period of the COVID-19 emergency declaration in Puerto Rico, while minimizing the impact of the pandemic to the health system capacity, and the contagion of the employees and customers.

ABOUT COVID-19⁸

Coronaviruses are a large family of viruses that may cause illness in humans or animals. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome⁹ (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19.¹⁰ Coronaviruses are single strand enveloped RNA virus belonging to the family of *Coronaviridae* of zoonotic origin.

COVID-19 is the clinical syndrome associated with SARS-CoV-2 infection, which is characterized by a respiratory syndrome with a variable degree of severity, ranging from a mild upper respiratory illness to severe interstitial pneumonia and Acute Respiratory Distress Syndrome (ARDS).¹¹ Coronaviruses are named for the crown appearance on electron microscopy. There are four genera of the coronaviruses, known as alpha, beta, gamma, and delta.¹² The SARS-CoV-2 virus is a betacoronavirus, like MERS-CoV and SARS-CoV.

SYMPTOMS

According to the Centers for Disease Control and Prevention CDC, generalized symptoms may appear 2-14 days after exposure.¹³

- Cough
- Shortness of breath or difficulty breathing

Or at least two of these symptoms

⁸ COVID-19 information is constantly evolving, therefore, it is strongly recommended to seek additional safety, medical and epidemiological information from credible sources such as the Centers for Disease Control and Prevention (CDC), Puerto Rico Department of Health, PROSHA, OSHA and the World Health Organization (WHO).

⁹ CDC, Middle East Respiratory Syndrome (MERS), Available from: <https://www.cdc.gov/coronavirus/mers/index.html>

¹⁰ World Health Organization - Geneva, Q&A on coronavirus (COVID-19), 8 April 2020/Q&A, Available from: <https://www.who.int/news-room/q-a-detail/q-a-coronavirus>

¹¹ COVID-19, SARS, and MERS: are they closely related?, N. Petrosillo et al, Available from: <https://doi.org/10.1016/j.cmi.2020.03.026>

¹² CDC, Human Coronavirus Types, Available from: <https://www.cdc.gov/coronavirus/types.html>

¹³ CDC Coronavirus Disease 2019 (COVID-19) Symptoms of Coronavirus, April 28, 2020 Available from: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

- Fever
- Chills
- Repeated shaking with chills
- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell

In addition to the symptoms presented in the CDC guidelines, WHO¹⁴ also includes tiredness as a common symptom. Other symptoms reported¹⁵ may include diarrhea, abdominal pain, severe vomiting and neurological changes. The list of symptoms is not all-inclusive; therefore, CDC and WHO recommends consulting a medical provider for any symptoms of concern.

HOW COVID-19 SPREADS

According to CDC guidelines¹⁶ and the PR Department of Health available information as of the date of the approval of this guideline, COVID-19 is thought to be spread mainly from person to person.

- Between people who are in close contact with one another (within about 6 feet).
- Through respiratory droplets produced when an infected person coughs, sneezes, or talks that can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

It may be possible that a person can get COVID-19 by touching a surface or object that has SARS-CoV-2 on it and then touching their mouth, nose, or possibly their eyes, but this is not thought to be the primary way the virus spreads.^{17,18}

Viral shedding by asymptomatic people may represent 25–50% of total infections.¹⁹

- Viral shedding may antedate symptoms by 1–2 days.
- Viral titres are highest in the earliest phases of infection.

¹⁴ WHO, Coronavirus, April 28, 2020 Available from: https://www.who.int/health-topics/coronavirus#tab=tab_3

¹⁵ Coronavirus disease 2019, Mayo Clinic, April 30, 2020, Available from: <https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/tvc-2047993>

¹⁶ CDC, Coronavirus disease 2019, How it Spreads, Available from: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>

¹⁷ CDC, Guidance on Preparing Workplace for COVID-19, OSHA 3990-03 2020 Available from: <https://www.osha-slc.gov/Publications/OSHA3990.pdf>

¹⁸ WHO, Coronavirus, April 28, 2020, Available from: <https://www.who.int/news-room/q-a-detail/q-a-coronavirus>

¹⁹ Auwarter, Paul, April 27 2020 John Hopkins ABX Guide Available from: https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/540747/all/Coronavirus_COVID_19_SARS_Cov_2

COVID-19 PLAN

Scope:

To define specific non-pharmaceutical interventions measures adopted by any privately or publicly owned company or organization based in Puerto Rico, whose workforce is active or plans to be active, to mitigate COVID-19 potential employee exposure risks related to workplace activities.

Roles and Responsibilities:

- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to ensure there is a mechanism in place to update the COVID-19 Business Re-Opening Plan as new OSHA, PROSHA, or CDC guidelines are published.
- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to ensure there is a protocol to make certain that all employees are properly trained and understand the COVID-19 Business Re-Opening Plan developed by the Company.
- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to maintain a list of all the active employees.
- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to submit a report providing the number of active employees, the number of COVID-19 positive results of any active employee, the number of quarantined employees, and any other relevant information in the frequency established by the Puerto Rico Department of Labor and or the Department of Economic Development and Commerce. For the purposes of the report an active employee is an employee that is not working from home.
- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to approve the Business Re-Opening Plan.
- It is the responsibility of the Company's highest-ranking official based in Puerto Rico to submit a COVID-19 Self-Certification Notification to the Puerto Rico Occupational Safety and Health Administration.

Non-Pharmaceutical Interventions:

Any Active Company shall maintain an actualized list of all employees defined as an "active workforce." For this plan, an active workforce refers to all employees that are working for the company excluding employees working from home.

Any Active Company needs to complete a risk assessment considering the elements included in the "Risk Assessment Tool" included in Appendix 1: Risk Assessment and Exposure Control Measures Tool.

	expected to be effective against SARS-CoV-2 based on data for harder to kill viruses. Follow the manufacturer's instructions for use of all cleaning and disinfection products (e.g., concentration, application method and contact time, PPE).
<i>Personal Hygiene Practices</i>	Actions aimed to promote and increase hand washing practices, either with soap and water or using alcohol-based hand rubs containing at least 60%, especially after touching frequently used items or surfaces.
<i>Client Exposure</i>	Actions aimed to reduce employee exposure to clients. Actions may include requiring personal protection equipment such as masks to clients, installing installation of physical barriers, use of drive through facilities, implementing on-line sale with home delivery or product pick up services.
<i>Surveillance and Employee Protection Controls²¹</i>	
<i>Employee Surveillance Controls</i>	Actions aimed to implement surveillance practices such as daily temperature check.
<i>Use of personal of mask in addition to required Protection Equipment (PPE) Controls</i>	Actions aimed to require and provide personal mask protection equipment, including but not limited to masks, respirators, gloves, eye protection to employees.

Social Distancing Controls²²

Any Active Company needs to document the social distancing controls adopted to mitigate COVID-19 risks identified as a result of the risk assessment process.

Table 2 Social Distancing Controls

	DESCRIPTION
<i>Work layouts modifications</i>	Actions aimed to increase distance between coworkers' clients and service providers in a working area.
<i>Physical areas demarcation</i>	Actions aimed to provide a visual signal to maintain distance between co-workers, clients and service providers in a working area.
<i>Physical barriers</i>	Installation of physical barriers to minimize direct contact, such as plastic shields or glasses in service counters and offices.

^{22,23} Guidelines Opening Up America Again, Available from <https://www.whitehouse.gov/openingamerica/>

Any Active Company needs to document the measures adopted to mitigate COVID-19 risks identified as a result of the risk assessment process.

Table 1: Non-Pharmaceutical Interventions²⁰

	DESCRIPTION
Employee Related Controls	
<i>Family Nucleus Exposure Risk</i>	Actions aimed to mitigate the impact associated to employees exposure to family members that work in high risk jobs as defined in page 19 FAMILY NUCLEUS EXPOSURE:
<i>Community Exposure Risks</i>	Actions aimed to mitigate the impact associated to community exposure as defined in page 17 GEOGRAPHICAL EXPOSURE
<i>Age Bracket Risks</i>	Actions aimed to provide special accommodations for personnel who are over 65 years old.
<i>Underlying Medical Conditions Risks</i>	Actions aimed to provide special accommodations for personnel with underlying medical conditions that increase the risk of serious COVID-19 for individuals of any age listed in Appendix 2: Underlying medical conditions that increase risk of serious COVID-19 for individuals of any age.
Workplace Related and Engineering Controls	
<i>Facility Occupancy</i>	Actions aimed to reduce the occupancy of working areas, and buildings as compared to approved building capacity provided in the operational permits.
<i>Use of Common Areas</i>	Actions aimed to close or minimize the use of common areas where personnel are likely to congregate and interact.
<i>HVAC Modifications</i>	Actions aimed to modify the number of air changes or to increase the volume of air in working rooms for facilities with HVAC units.
<i>Contact Surfaces Cleaning, Concurrent Disinfection</i>	Actions aimed to modify and increase housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. When choosing cleaning chemicals, employers should consult information on Environmental Protection Agency (EPA)-approved disinfectant labels with claims against emerging viral pathogens. Products with EPA-approved emerging viral pathogens claims are

²⁰ OSHA Guidance on Preparing Workplace for COVID-19, Apr 28, 2020. Available from: <https://www.osha.gov/Publications/OSHA3990.pdf>

<i>Use of shared equipment (telephones, chairs, working tables) modifications</i>	Actions aimed to minimize the use of shared equipment.
<i>Work hours modifications</i>	Actions aimed to reduce the facility occupancy.
<i>Flexible work plan modifications (ex. work from home)</i>	Actions aimed to reduce number of active workers.
<i>Work from home protocol for personnel who are members of a vulnerable population.</i>	Protocols describing the special accommodations for personnel who are members of a vulnerable population.
<i>Common areas layouts modifications</i>	Actions aimed to increase distance between coworkers' clients and service providers in a common area.

Administrative Controls

Any Active Company needs to document the Administrative Controls adopted to mitigate COVID-19 risks identified as a result of the risk assessment process.

Table 3 Administrative Controls

	DESCRIPTION
<i>COVID-19 Illness Notification Protocol</i>	Development and implementation of guideline or procedure for employees to report when they are sick or experiencing symptoms of COVID-19.
<i>COVID-19 Employee Surveillance Protocol</i>	Development and implementation of guideline or procedure for the prompt identification of potentially infectious individuals.
<i>COVID-19 Person Under Investigation Isolation Protocol</i>	Development and implementation of guideline or procedure for the prompt isolation of people who have signs and/or symptoms of COVID-19.
<i>COVID-19 Visuals Aids</i>	Posting of COVID 19 Visual Aids
<i>COVID -19 Employee Self-Monitoring programs</i>	Development and implementation of guideline or procedure for employees to self-monitor for signs and symptoms of COVID-19 if they suspect possible exposure
<i>COVID -19 Management of Breaks and Food Periods</i>	Development and implementation of guideline or procedure.
<i>COVID -19 Use of Common Areas</i>	Development and implementation of guideline or procedure.
<i>COVID -19 Risk Notification</i>	Development and implementation of guideline or procedure.
<i>COVID -19 Respiratory Etiquette</i>	Development and implementation of guideline or procedure.

COVID -19 Hand Washing	Development and implementation of guideline or procedure.
COVID -19 Remote Meeting Management	Development and implementation of guideline or procedure.
COVID -19 Non-essential Travel	Development and implementation of guideline or procedure.
COVID-19 Use of PPE	Development and implementation of guideline or procedure.
COVID-19 Employee Training in new protocols and procedures	Maintain documented evidence of employee and contractors training.
COVID-19 Workforce Contact Tracing	Development and implementation of guideline or procedure.

INCIDENT MANAGEMENT PLAN

The Incident Management Plan describes the steps that will be followed in the event of a Person Under Investigation (PUI) or a laboratory-confirmed test of COVID-19 is reported by an employee belonging to the active workforce. Incident management program shall include:

1. Active Employees list by site, shift, and municipality.
2. Quarantine protocol: A quarantine protocol defines the steps the Company will follow in the event of an active employee notifies of a positive Polymerase Chain Reaction (PCR) test.
3. Cleaning and Disinfecting protocols: The Cleaning and Disinfecting protocols define the steps the company will follow to perform surface cleanings and areas disinfection when needed or is triggered by a positive COVID-19 test result of an employee belonging to the "active workforce."
4. Return to Work (RTW) protocol: An RTW protocol defines the steps the Company will follow to re-activate operations after a COVID-19 related incident is reported.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to maintain a list of all the active workforce.

COMMUNICATION PLAN

During an emergency, such as COVID-19, it is essential to address all the organization's stakeholders. See Appendix 4: Communication Plan

1. Internal Communication Plan: An internal communication plan describes the process to be used to reach out to employees.

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Administration via email, PROSHA Form FC-101 "Auto Certificación Patronal – Plan Patronal de Control de Exposición a COVID-19".

EFFECTIVE DATE

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to ensure there is a mechanism in place to update the COVID-19 Business Re-Opening Plan as new OSHA, PROSHA, or, CDC guidelines are published.

Each Company will define a COVID-19 plan effective date, plan revision number and plan revision dates, as new CDC, PROSHA, WHO recommendations become available.

APPROVAL

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to approve the Business Re-Opening Plan.

APPENDIX

Appendix 1: Risk Assessment and Exposure Control Measures Tool

Risk Assessment

The COVID-19 Index considers the risk factors weight is as follows:

1. High: 10
2. Medium: 5
3. Low: 1

I. FAMILY NUCLEUS EXPOSURE:

Classify level of exposure risk of the active workforce to other family members that are active workers in sectors with a very high, high, medium or low exposure as defined in OSHA Guideline 3990-03 20²³.

1. HIGH RISK: Any active employee with direct contact in the family nucleus to jobs classified as Very High or High exposure risk as defined in OSHA guidelines.
 - a. Healthcare workers (e.g., doctors, nurses, dentists, paramedics, emergency medical technicians) performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental

²³ Guidance on preparing workplace for COVID-19, OSHA 3990-03-20

2. External Communication Plan: An external communication plan describes the process to be used to reach out to shareholders, clients, providers, contractors, union leaders, retirees, and community, including notification to the required authorities of COVID-19 suspects or positive for contact tracing purposes.

COVID-19 INDEX

Each Company will estimate the COVID-19 Index for internal reference purposes only. See: People 65 years and older
People with chronic lung disease or moderate to severe asthma
People who have serious heart conditions

1. People who are immunocompromised
 - a. Many conditions can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications
2. People with severe obesity (body mass index [BMI] of 40 or higher)
3. People with diabetes
4. People with chronic kidney disease undergoing dialysis
5. People with liver disease

Appendix 3: COVID-19 Index Template.

SUCCESSION PLAN

Each Company will define a COVID-19 succession plan, identifying the line of command that activates in the event the highest-ranking officer is not available.

ENFORCEMENT

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to ensure there is a protocol to ensure all employees are properly trained and understand the COVID-19 Business Re-Opening Plan developed by the Company.

SELF-CERTIFICATION NOTIFICATION

Each Company will prepare and submit via email Self-Certification PROSHA Form 101 "Auto Certificación Patronal – Plan Patronal de Control de Exposición a COVID-19" to PROSHA.

It is the responsibility of the Company's highest-ranking official based in Puerto Rico to submit a COVID-19 Self-Certification Notification to the Puerto Rico Occupational Safety and Health

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procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients.

- b. Healthcare or laboratory personnel collecting or handling specimens from known or suspected COVID-19 patients (e.g., manipulating cultures from known or suspected COVID-19 patients).
 - c. Morgue workers performing autopsies, which generally involve aerosol-generating procedures, on the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.
 - d. Healthcare delivery and support staff (e.g., doctors, nurses, and other hospital staff who must enter patients' rooms) exposed to known or suspected COVID-19 patients. (Note: when such workers perform aerosol-generating procedures, their exposure risk level becomes very high.)
 - e. Medical transport workers (e.g., ambulance vehicle operators) moving known or suspected COVID-19 patients in enclosed vehicles.
 - f. Mortuary workers involved in preparing (e.g., for burial or cremation) the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.
2. MEDIUM RISK: Any active employee with direct contact in the family nucleus to jobs classified as Medium exposure risk as defined in OSHA guidelines.
 - a. Medium exposure risk jobs include those that require frequent and/or close contact with (i.e., within 6 feet of) people who may be infected with SARS-CoV-2, but who are not known or suspected COVID-19 patients.
 - b. Workers that live in areas without ongoing community transmission but may have frequent contact with travelers who may return from international and US locations with widespread COVID-19 transmission.
 - c. Employees that live in where there is ongoing community transmission, workers in this category may have contact with the general public (e.g., schools, high-population-density work environments, some high-volume retail settings).
 3. LOW RISK: Any active employee with direct contact in the family nucleus to jobs classified as Low exposure risk as defined in OSHA guidelines.
 - a. Lower exposure risk (caution) jobs are those that do not require contact with people known to be, or suspected of being, infected with SARS-CoV-2 nor frequent close contact with (i.e., within 6 feet of) the general public. Workers in this category have minimal occupational contact with the public and other coworkers.

II. GEOGRAPHICAL EXPOSURE

Classify the level of geographical risk of the active workforce according to the geographic region they reside in.

1. HIGH RISK: Any active employee residing in a municipality with positive molecular cases in the upper quantile of PR case distribution.
2. MEDIUM RISK: Any active employee residing in a municipality with positive molecular cases within the upper and lower quantile of PR case distribution.
3. LOW RISK: Any active employee residing in a municipality with positive molecular cases molecular in the lower quantile of PR case distribution.

III. AGE BRACKET:

Classify the level of contagious risk due to age factor according to the distribution of the active workforce.

1. HIGH RISK: Any active employee age greater than or equal to 65 years²⁴
2. LOW RISK: All active employees age less than 65 years

IV. UNDERLYING MEDICAL CONDITIONS:

Classify the level of health conditions risk associated with the active workforce.

NOTE: The disclosure of any health condition must comply with the HIPPA Privacy Rule.

1. HIGH RISK: Active workers have one or more underlying medical conditions that increase the risk of serious outcomes as defined by the CDC. See Appendix 2: *Underlying medical conditions that increase risk of serious COVID-19 for individuals of any age*
2. LOW RISK: None of the active workers have one or more underlying medical conditions that increase the risk of serious outcomes as defined by the CDC.

V. WORKSPACE EXPOSURE

1. Facility Occupancy Level
 - a. HIGH RISK: 80-100% of maximum capacity as per the facility operations permit.
 - b. MEDIUM RISK: 50-79% of maximum capacity as per the facility operations permit.
 - c. LOW RISK: <50% of maximum capacity as per the facility operations permit.
2. Use of Common Areas; (Cafeteria, Restrooms, Locker rooms, Conference Rooms, dining areas, etc.)
 - a. HIGH RISK: Common areas open. Without physical barriers, nor limitation of persons allowed over a specified time.

²⁴ CDC Underlying Conditions: Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/underlying-conditions.html>

- b. MEDIUM RISK: Common areas open with physical barriers and a limitation of persons allowed over a specified time period.
 - c. LOW RISK: Common areas closed.
3. HVAC Controls
 - a. HIGH RISK: Facility or working space with air conditioning units without High Efficiency Particulate Air (HEPA) filtration.
 - b. LOW RISK: Facility or working space with HVAC units with HEPA filtration, negative pressure rooms or open spaces.
 4. Hand wash stations/ facilities
 - a. HIGH RISK: Do not provide hand wash stations.
 - b. LOW RISK: Hand wash stations are provided for employees only.
 - c. LOW RISK: Hand wash stations are available employees and customers.

VI. CLIENT EXPOSURE

1. HIGH RISK: Requires direct contact with the public or customers for product or service delivery.
2. MEDIUM RISK: Low level of contact with the public or customers for product delivery or service delivery. (ex: Drive-through windows or home delivery)
3. LOW RISK: No level of contact with the public or customers for product or service delivery.

EXPOSURE MITIGATION CONTROLS

The COVID-19 Index considers the exposure mitigation measures weight is as follows:

HIGH: 10 (Most Effective)
Medium: 5
Low: 1 (Effective)

MEASURES

I. Physical-Social Distancing: High ²⁵

1. Remote Work for Employees Over 65
2. Remote Work for Employees with Underlying Medical Conditions that Increase the Risk of Serious Outcomes as Defined by the CDC.
3. Remote Work for Employees with High Family Nucleus Exposure Risk.
4. Remote Work for Employees with High Community Exposure Risk.

^{25,26} Guidelines for Opening Up America Again Available from: <https://www.whitehouse.gov/openingamerica/>
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II. Surveillance and Testing: High

1. Surveillance programs²⁶
 - a. Daily temperature checks for active workforce.
 - b. Contact tracing program for COVID-19 positive test results.
2. COVID-19 Testing programs following the recommendations provided by the Puerto Rico Health Task Force "Uso de las Pruebas de COVID-19 en el ambiente laboral"²⁷ revised on April 25, 2020 and those included in the CDC Testing Guidelines.²⁸
 - a. Molecular (PCR) test before active workforce re-activation, if positive follow CDC and Department of Health recommendations. A negative test implies that probably, the employee was not infected at the time the sample was collected. However, that does not mean that the employee will not get sick. The test result only means that the employee did not have COVID-19 at the time of testing.²⁹

Note: If the employee test positive or negative for COVID-19, no matter the type of test, the employee should take all required preventive measures established by the company.³⁰

- b. Molecular (PCR) test before return to work after internal quarantine (14 days) activation, if positive follow CDC and Department of Health recommendations.

III. Personal Protection Equipment: High ³¹

1. Use of N95 respirator complying with OSHA respiratory protection standards 29 CFR § 1910.134 (f)(2) and OSHA temporary enforcement guidance.³² Only recommended by CDC for active workforce in high or very high exposure risk jobs.
2. Use of surgical mask
3. Use of goggles
4. Use of face shield: only recommended for active workforce in high or very high exposure risk jobs
5. Use of gloves: only recommended for active workforce in high or very high exposure risk jobs

²⁷ PR Medical Task Force Guideline: "Uso de las Pruebas de COVID-19 en el Ambiente Laboral" Revision, April 25, 2020 Available from: <https://covid19frcm.upr.edu/wp-content/uploads/sites/45/2020/04/Uso-de-Pruebas-en-Ambiente-Laboral-Abril-26-20.pdf>

²⁸ CDC. Testing for COVID-19, Apr 30, 2020. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/testing.html>

²⁹ CDC. Testing for COVID-19, Apr 30, 2020. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/testing.html>

³⁰ CDC. Testing for COVID-19, Apr 30, 2020. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/testing.html>

^{31,32,33} Guidelines for Opening Up America Again Available from: <https://www.whitehouse.gov/openingamerica/>

³² OSHA Temporary Enforcement Guidance-Healthcare Respiratory Protection Annual Fit-Testing for N95 Filtering facepieces During COVID-19 outbreak. Available from: <https://www.osha.gov/memos/2020-03-14/Temporary-enforcement-guidance-healthcare-respiratory-protection-annual-fit>

6. Use of gowns: only recommended for active workforce in high or very high exposure risk jobs

IV. Safe Work Practices: Medium ³³

1. Increase availability of hand rub dispensers regularly refilled with >60% alcohol-based hand rubs.
2. Provide disinfectants and disposable towels to clean workstations.

V. Engineering and Environmental Controls: Medium

1. Physical barriers for social distancing
2. Increased cleaning frequency of contact surfaces (phones, keyboards, desk, tables)^{34,35}
3. Increase HVAC unit ventilation rate.
4. Install High-Efficiency air filters.
5. Install drive-through window for customer service.

VI. Employee Exposure and Social Distancing Measures: Medium

1. Work layouts modifications for social distancing
2. Common areas layouts modifications for social distancing
3. Modifications in the use of shared equipment such as telephones, keyboards, tooling.
4. Work area demarcation for physical and social distancing

VII. Administrative Controls: Medium

1. Illness notification protocol
2. Employee self-monitoring program
3. Employee family self-monitoring program
4. Respiratory etiquette protocol
5. Effective hand washing protocol
6. Facilities high contact surfaces cleaning and sanitation protocol
7. Non-essential traveling protocol
8. Terminal cleaning protocol
9. Non-essential travel protocol
10. Management of common facilities protocol
11. Quarantine management protocol
12. Virtual meeting protocol

³⁴ WHO. Getting your workplace ready for COVID-19 Available from: <https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf>

13. Management of breaks and food periods protocol
14. PUI notification protocol
15. COVID-19 visuals
16. Risk notification protocol

Appendix 2: Underlying medical conditions that increase risk of serious COVID-19 for individuals of any age

Disclosure³⁶: COVID-19 is a new disease and there is limited information regarding risk factors for severe disease. Based on currently available information and clinical expertise, **older adults and people of any age who have serious underlying medical conditions, particularly if not well controlled**, might be at higher risk for severe illness from COVID-19. Based on current information CDC guidance as of the date of this publication,³⁷

6. People 65 years and older
7. People with chronic lung disease or moderate to severe asthma
8. People who have serious heart conditions
9. People who are immunocompromised
 - a. Many conditions can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications
10. People with severe obesity (body mass index [BMI] of 40 or higher)
11. People with diabetes
12. People with chronic kidney disease undergoing dialysis
13. People with liver disease

Appendix 3: COVID-19 Index Template

COVID-19 Index template is available at: <https://app.smartsheet.com/sheets/x6QC2R8ex2Vw4XXrh36Q38cXfm7gCwM3qQPXr1?view=grid>

Table 4 COVID-19 Index

EVALUACIÓN DE FACTORES DE RIESGO Y MEDIDAS DE MITIGACIÓN PARA ESTIMAR EL INDICE DE COVID-19	MARQUE CON X LO QUE APLIQUE	Impacto
FACTORES DE RIESGO		

³⁶ CDC Coronavirus Disease 2019 Update Apr 27, 2020 Available at <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Symptoms-&Testing>

³⁷ CDC Coronavirus Disease 2019, April 30, 2020 Available from: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

Se mantienen activos empleados que en su entorno familiar están en contacto directo con empleados que laboran en industrias de muy alto o alto riesgo según definido por PR-OSHA		10
Se mantienen activos empleados activos que en su entorno familiar están en contacto directo con empleados que laboran en industrias de riesgo mediano según definido por PR-OSHA		5
Se mantienen empleados activos que en su entorno familiar están en contacto directo con empleados que laboran en industrias de bajo riesgo según definido por PR-OSHA		1
Se mantienen empleados activos que residen en municipios con casos confirmados en el cuadrante superior de la distribución de casos en PR		10
Se mantienen empleados activos que residen en municipios con casos confirmados entre el cuadrante inferior y el cuadrante superior de la distribución de casos en PR		5
Se mantienen empleados activos que residen en municipios con casos confirmados en el cuadrante inferior de la distribución de casos en PR		1
Se mantiene empleados activos mayores de 65 años		10
Se mantiene empleados activos cuyas edades son menores a 65 años		1
Se mantienen empleados activos de cualquier edad con condiciones de salud de riesgo a efectos serios de COVID-19 establecidas en las guías del CDC		10
Solo se mantienen empleados activos sin condiciones de salud de riesgo a efectos serios de COVID-19 establecidas en las guías del CDC		1
La ocupación de la facilidad es de > 80% de lo permitido por el permiso de operación		10
La ocupación de la facilidad esta entre el 51% y el 80% de lo permitido por el permiso de operación		5
La ocupación de la facilidad es menor o igual al 50% de lo permitido por el permiso de operación		1
Se mantienen las áreas comunes abiertas y en uso		10
Se mantienen las áreas comunes abiertas, pero con controles de distanciamiento social y barreras físicas		5
No se mantienen las áreas comunes abiertas		1
La facilidad tiene ventilación provista por sistemas de aire acondicionado sin filtros de particulado de alta eficiencia		10
La facilidad tiene un sistema de ventilación central con filtros de particulado de alta eficiencia, con recirculación		5
La facilidad solo tiene sistema de ventilación central con filtros de particulado de alta eficiencia, sin recirculación		1
Los empleados activos trabajan en cuartos con presión negativa.		1
Los empleados activos operan al aire libre sin sistema de ventilación forzada.		1

La empresa no provee estaciones de higiene de mano a los empleados activos		10
La empresa provee estaciones de higiene de mano a los empleados activos		1
La empresa provee estaciones de higiene de mano a los empleados activos y clientes		1
Los empleados activos están en contacto directo con los clientes para proveer servicios o entregar productos		10
Los empleados activos tienen algún nivel de contacto mínimo con los clientes (existe facilidades de recogido por servi-carro o entrega domiciliaria)		5
Los empleados activos no tienen contacto directo con los clientes		1
MEDIDAS DE MITIGACIÓN		
Se implemento programa de trabajo desde el hogar para empleados sobre 65 años		10
Se implemento programa de trabajo desde el hogar para empleados de cualquier edad con condiciones de salud de riesgo según definidas por las guías del CDC		10
Se implemento programa de trabajo desde el hogar para empleados con alto riesgo de exposición familiar a personas trabajando en trabajos de alto o muy alto riesgo		10
Se implemento programa de trabajo desde el hogar para empleados con alto riesgo de exposición geográfica		10
Se implemento una verificación diaria de temperatura a empleados activos		10
Se implemento un programa de rastreo de contacto o "Contact Tracing" para empleados con resultados de PCR positivos		10
Se hacen pruebas moleculares (PCR) a los empleados antes de reactivar las operaciones ³⁸		10
Se hacen pruebas moleculares (PCR) a todos los empleados activos luego de activarse una cuarentena como resultado de un empleado activo resultar positivo a COVID-19 antes de reinstalarlos a el área de trabajo.		10
Se provee respirador N95 a los empleados activos cumpliendo con los requisitos de las guías de OSHA (donde sea requerido como EPP basado en las guías de PROSHA para áreas de trabajo con alto o muy alto riesgo)		10
Se provee mascarilla quirúrgica a los empleados activos		10
Se provee caretas o "Face Shield" a los empleados activos		10
Se provee goggles a los empleados activos		10
Se proveen guantes a los empleados activos (donde sea requerido como EPP basado en las guías de PROSHA para áreas de trabajo con alto o muy alto riesgo)		10

³⁸ Healthcare providers should report positive results to the PR Department of Health. The employer is not responsible to report to the PR Department of Health any positive test results.
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Se proveen batas a los empleados activos (donde sea requerido como EPP basado en las guías de PROSHA para áreas de trabajo con alto o muy alto riesgo)		10
Se provee y se aumento la disponibilidad de dispensadores de alcohol en gel de manos (con concentración de alcohol > de 60%) para el uso de los empleados activos		5
Se provee desinfectantes y paños de limpieza para las estaciones de trabajo		5
Se colocaron barreras físicas para garantizar el distanciamiento social		5
Se aumento en la frecuencia de limpieza y desinfección de superficies de contacto y se documenta la frecuencia de limpieza		5
Se hicieron cambios para aumentar la ventilación en las áreas de trabajo		5
Se instalaron unidades de filtración de alta eficiencia en el sistema de aire acondicionado		5
Se implemento concepto de servi-carro para que los clientes recojan los productos		5
Se hicieron cambios al diseño en las áreas de trabajo para lograr distanciamiento social		5
Se hicieron cambios al diseño en áreas de uso común para lograr distanciamiento social		5
Se hizo demarcación física de áreas de trabajo para lograr distanciamiento social (6 pies)		5
Se hicieron modificaciones al uso de equipo común.		5
Se tienen protocolo de comunicación de condiciones de salud asociadas a COVID-19		5
Se implementaron programas de auto vigilancia para empleados		5
Se implementaron programas de auto vigilancia para familiares viviendo con empleado		5
Se capacito al personal activo en reglas de etiqueta de respiración		5
Se capacito al personal activo en practicas de higiene de manos		5
Se tienen protocolos de limpieza y desinfección de superficies de alto contacto		5
Se tienen protocolos de viaje no esenciales		5
Se tiene protocolo para manejo de áreas comunes garantizando el distanciamiento físico y social		5
Se tiene un protocolo para manejo de cuarentena		5
Se tiene un protocolo para manejo de reuniones virtuales		5
Se tiene un protocolo para manejo de toma de alimentos y breaks		5
Se utilizan visuales de alerta sobre COVID-19		5
Se tiene un protocolo de notificación de riesgos a los empleados		5
Se tiene un protocolo para manejo de personas bajo investigación de contagio		5

Se llevo a cabo capacitación de empleados en guías de operación para reducir impacto y propagación de COVID-19		5
INDICE COVID-19= Suma de Impacto de Riesgos/ Suma de impacto de medidas de mitigación		

Appendix 4: Communication Plan

COMMUNICATION PLAN

A critical step for the orderly re-opening of all the economic sectors in Puerto Rico is the development and implementation of a communication plan. Communication Plans should define key stakeholders and the communication channels to be used.

Internal Communication Channels

1. Video Conference meetings
2. Email Blasts
3. Flyers for Active Employees
4. Fact Sheets
5. Checklists
6. Frequently Questions Asked Documents
7. Visual Aids (ex: CDC, WHO posters)
8. Social Media platforms

Internal Communications Elements ^{39,40,41}

1. Center the communications content on ensuring the safety and security of the workforce.
2. Build trust with responsive, honest, transparent, consistent and nuanced messaging that acknowledges and address workforce perceptions.
3. Always refer to reliable sources of information, ex: CDC Guidelines, PR Department of Health (DOH) Guidelines, DOH official communications, PR DOH Dashboard Data, Department of Labor Guidelines and official communications, PROSHA Guidelines, DDEC Official Communications, Executive Orders), WHO Guidelines.
4. Use plain language, state clearly and in easy to follow language the facts
5. Communicate what is known, what is unknown, and what is being done to prevent and control transmission.

³⁹ CDC Public Health Communications Guideline Available from: <https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-communicators-get-your-community-ready.html>
⁴⁰ CERIC in an infectious disease outbreak , April,28, 2020 Available from: <https://emergency.cdc.gov/cerc/resources/pdf/315829-A-15-CERIC-Infectious-Disease.pdf>
⁴¹ WHO Risk Communication and Community engagement guidelines April 28,2020 Available from: <https://www.who.int/publications-detail/responding-to-community-spread-of-covid-19>
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6. Express empathy by acknowledging what your active force may be feeling and their challenges.
7. Discuss all prevention and mitigation controls implemented in the facility and the associated risks.
8. Show respect, listen to the issues and solutions brought up by your workforce.
9. Develop talking points to be used by all Company leaders
10. Establish a regular rhythm of communications
11. Discuss COVID-19 specific policies and procedures
12. If remote work policies are established, share the information regarding applicability, tools, and processes to be followed.
13. Provide detailed instructions about what employees should do if they suspect they have been exposed to COVID-19.
14. Share your plans in the event of a notification of a positive COVID-19 active worker, communicate specific actions as it relates to co-workers, quarantine measures, return to work criteria, cleaning, and disinfection plans for affected working spaces.
15. Consider including COVID-19 financial and supply chain impact, if any, on the company.
16. Share relevant local and national situational summaries.
17. Meet with your existing emergency planning and operations team to update the emergency communication plan for your facility.
18. Share your crisis and emergency risk communication plan.
19. Keep time for questions and answers.

External Communications

1. Identify stakeholders: suppliers, clients, community, government agencies, regulators, union representatives, and retirees.
2. Define communication channel
3. Create a plan to interact with the media in the event of an incident in your facility, include a stand-by statement.
4. Identify Company spoke person and develop talking points.
5. Define communication frequency.

Appendix 5: COVID-19 Test Results Interpretation⁴²

In addition to the information provided below, please refer to the Health Task Force Guidelines "Uso de las Pruebas de COVID-19 en el Ambiente Laboral" Revision, April 25, 2020⁴³.

1. The molecular or PCR test measure the presence of the SARS-CoV-2 virus is present in the person tested and it means that they can infect others around them.

⁴² Developed by José F. Cordero, MD, MPH, April 30, 2020
⁴³ "Uso de las Pruebas de COVID-19 en el Ambiente Laboral" Revision, April 25, 2020 Available from: <https://covid19frcm.upr.edu/wp-content/uploads/sites/45/2020/04/Uso-de-Pruebas-en-Ambiente-Laboral-Abril-26-20.pdf>

2. The serology test, a blood test, measures the body's response to the SARS-CoV-2 virus infection and a very recent study suggest that the test is more likely to become positive after 7-10 days from the time that clinical symptoms start and even more reliable on or after 20 days.
3. A positive serology would suggest being exposed but does not offer an indication of whether the individual is shedding the virus.
4. A person with a positive molecular test indicates that the individual is shedding the SARS-CoV-2 virus.
5. A person with a positive serology and a negative molecular test would suggest that had the infection and is not shedding the virus at this time. The general wisdom (not scientific evidence) is that individuals in this category should be considered low risk because of potential protection from the antibodies against the SARS-CoV-2 virus. The problem is that there is no solid scientific evidence that one infection from SARS-CoV-2 virus may protect against a second infection. The high mortality among health care professionals in China, Italy, Spain, and now NYC suggests that a previous SARS-CoV-2 virus may not be enough.
6. A person negative to the serology test and negative to the molecular test would identify an individual who has not been exposed to the SARS-CoV-2 virus
7. A positive to the molecular test and negative in the serology would suggest a recent infection. Note that CDC studies suggest that between 20% and 50% of infected persons shedding the virus are asymptomatic.

Appendix 6: COVID-19 Printable Visual Aids

1. <https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf>
2. <https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs-sp.pdf>
3. <https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms.pdf>
4. <https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms-sp.pdf>
5. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/safe-greetings.png?sfvrsn=2e97004e_2
6. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/handshaking.png?sfvrsn=4aed53c5_2
7. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/wearing-gloves.png?sfvrsn=ec69b46a_2
8. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-3.jpg>
9. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-2.jpg>
10. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-1.jpg>
11. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-smart-if-you-develop.jpg>

12. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-smart-inform.jpg>
13. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-safe.jpg>
14. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-support.jpg>
15. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-address-stigma.jpg>
16. <https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-address-fear.jpg>
17. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/protect-yourself/blue-1.png?sfvrsn=3d15aa1c_2
18. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/protect-yourself/blue-2.png?sfvrsn=2bc43de1_2
19. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/protect-yourself/blue-3.png?sfvrsn=b1ef6d45_2
20. https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/protect-yourself/blue-4.png?sfvrsn=a5317377_11
21. <https://www.who.int/images/default-source/health-topics/coronavirus/pregnancy-breastfeeding/who--pregnancy--1.png>
22. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-1.png>
23. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-2.png>
24. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-3.png>
25. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-4.png>
26. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-5.png>
27. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-6.png>
28. <https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-7.png>

Appendix 7: COVID-19 Educational Videos

1. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos>
2. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos>

3. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos>
4. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos>

Appendix 8: COVID-19 Myth Busters Visuals

1. [https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/eng-mythbusting-ncov-\(15\).png?sfvrsn=a8b9e94_2](https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/eng-mythbusting-ncov-(15).png?sfvrsn=a8b9e94_2)
2. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-sun-exposure.tmb-768v.jpg?sfvrsn=658ce588_4
3. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-breathing-exercise.tmb-768v.jpg?sfvrsn=db06f4a9_4
4. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-breathing-exercise.tmb-768v.jpg?sfvrsn=db06f4a9_4
5. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-alcohol.tmb-1920v.jpg?sfvrsn=19ea13fb_4
6. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/52.tmb-1920v.png?sfvrsn=862374e_4
7. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-cold-snow.tmb-1920v.png?sfvrsn=1e557ba_4
8. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-hot-bath.tmb-1920v.png?sfvrsn=f1ebbc_4
9. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-mosquito-bite.png?sfvrsn=a1d90f6_2
10. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-27.png?sfvrsn=d17bc6bb_2
11. <https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbusters-31.png>
12. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-25.png?sfvrsn=d3bf829c_4
13. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-33.png?sfvrsn=47bfd0aa_4
14. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/11.png?sfvrsn=972a51e_4
15. <https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/23.png>
16. <https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/19.png>
17. <https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbuster-2.png>
18. <https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbuster-3.png>

19. https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbuster-4.png?sfvrsn=e163bada_8

Appendix 9: CDC/WHO COVID-19 Related Guidelines ⁴⁴

1. [CDC's Laboratory Outreach Communication System \(LOCS\)](#) - Date 4/27/20
2. [Meat and Poultry Processing Workers and Employers](#) Date 4/26/20
3. [Information for Clinicians on Investigational Therapeutics for Patients with COVID-19](#) 4/26/20
4. [Considerations for Alternate Care Sites](#) 4/24/20
5. [COVID-19 Travel Recommendations by Country](#) 4/24/20
6. [Human Infection with COVID-19 Person Under Investigation \(PUI\) and Case Report Form](#) 4/23/20
7. [Interim Guidance for Public Health Professionals Managing People With COVID-19 in Home Care and Isolation Who Have Pets or Other Animals](#) 4/23/20
8. [Public Health Recommendations after Travel-Associated COVID-19 Exposure](#) 4/23/20
9. [Use Personal Protective Equipment when caring for Patients with Confirmed or Suspected COVID](#) 4/22/20
10. [What you should know about COVID-19 to protect yourself and others](#) 4/22/20
11. [Interim Infection Prevention and Control Guidance for Veterinary Clinics During the COVID-19 Response](#) 4/22/20
12. [Strategies to Optimize the Supply of PPE and Equipment](#) 4/22/20
13. [Interim Guidance for Homeless Service Providers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#) 4/22/20
14. [Strategies for Optimizing the Supply of N95 Respirators](#) 4/22/20
15. [Screening Clients at Homeless Shelters](#) 4/21/20
16. [CDC's role in helping cruise ship travelers during the COVID-19 pandemic](#) 4/21/20
17. [Interim Additional Guidance for Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Outpatient Hemodialysis Facilities](#) 4/21/20
18. [Households Living in Close Quarters](#) 4/18/20
19. [Interim Guidance on Management of Coronavirus Disease 2019 \(COVID-19\) in Correctional and Detention Facilities](#) 4/18/20
20. [Completing the Person Under Investigation \(PUI\) and Case Report Form](#) 4/18/20
21. [Case Report Form for Persons Under Investigation for COVID-19](#) 4/17/20
22. [What Mail and Parcel Delivery Drivers Need to Know about COVID-19](#) 4/17/20
23. [What Rideshare, Taxi, Limo, and other Passenger Drivers-for-Hire Need to Know about COVID-19](#) 4/17/20
24. [Information for Pediatric Healthcare Providers](#) 4/17/20
25. [Returning from International Travel](#) 4/16/20

⁴⁴ CDC Coronavirus Disease 2019 (COVID-19) Available from: <https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance-list.html?sort=date&3A%3Adesc>

26. [Public Health Communicators: Get Your Community Ready](#) 4/15/20
27. [Standard Operating Procedure \(SOP\) for Triage of Suspected COVID-19 Patients in non-US Healthcare Settings: Early Identification and Prevention of Transmission during Triage](#) 4/15/20
28. [Pregnancy and Breastfeeding](#) 4/15/20
29. [Preparing for COVID-19: Long-term Care Facilities, Nursing Homes](#) 4/15/20
30. [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 \(COVID-19\)](#) 4/15/20
31. [Cleaning and Disinfection for Non-emergency Transport Vehicles](#) 4/14/20
32. [Guidance for Pharmacies](#) 4/14/20
33. [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 \(COVID-19\)](#) 4/14/20
34. [Considerations for School Closure](#) 4/13/20
35. [Mitigation Strategies for Communities](#) 4/13/20
36. [Strategies to Mitigate Healthcare Personnel Staffing Shortages](#) 4/13/20
37. [Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19](#) 4/13/20
38. [Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#) 4/12/20
39. [Guidance for Child Care Programs that Remain Open](#) 4/12/20
40. [COVID-19 and Cooling Centers](#) 4/11/20
41. [Running Essential Errands](#) 4/10/20
42. [Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings \(Interim Guidance\)](#) 4/10/20
43. [Public Health Activity Guidance](#) 4/09/20
44. [Strategies for Optimizing the Supply of N95 Respirators](#) Date: 4/9/20
45. [Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](#) Date: 4/9/20
46. [Decontamination and Reuse of Filtering Facepiece Respirators](#) Date: 4/9/20
47. [CDC's role in helping cruise ship travelers during the COVID-19 pandemic](#) Date: 4/9/20
48. [Use Personal Protective Equipment when caring for Patients with Confirmed or Suspected COVID](#) Date: 4/8/20
49. [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 4/8/20
50. [Dental Settings](#) Date: 4/8/20
51. [COVID-19 Travel Recommendations by Country](#) Date: 4/7/20
52. [Guidance for Building Water Systems](#) Date: 4/7/20
53. [Outpatient and Ambulatory Care Settings: Responding to Community Transmission of COVID-19 in the United States](#) Date: 4/7/20
54. [People with Disabilities](#) Date: 4/7/20
55. [Information for Healthcare Professionals: COVID-19 and Underlying Conditions](#) Date: 4/6/20

56. [Considerations for Inpatient Obstetric Healthcare Settings](#) Date: 4/6/20
57. [Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease \(COVID-19\)](#) Date: 4/6/20
58. [Information for Healthcare Professionals: COVID-19 and Underlying Conditions](#) Date: 4/6/20
59. [Operational Considerations for the Identification of Healthcare Workers and Inpatients with Suspected COVID-19 in non-US Healthcare Settings](#) Date: 4/6/20
60. [Strategic Priority Infection Prevention and Control Activities for Non-US Healthcare Settings](#) Date: 4/6/20
61. [Guidance for Childcare Programs that Remain Open](#) Date: 4/6/20
62. [Running Essential Errands](#) Date: 4/6/20
63. [Mitigate Healthcare Personnel Staffing Shortages](#) Date: 4/6/20
64. [Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings \(Interim Guidance\)](#) Date: 4/4/20
65. [Social Distancing, Quarantine, and Isolation](#) Date: 4/4/20
66. [Information for Pediatric Healthcare Providers](#) Date: 4/3/20
67. [Human Infection with COVID-19 Person Under Investigation \(PUI\) and Case Report Form](#) Date: 4/1/20
68. [Travelers Returning from International Travel](#) Date: 4/1/20
69. [Cleaning and Disinfection for Community Facilities](#) Date: 4/1/20
70. [Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 \(COVID-19\) in Healthcare Settings](#) Date: 4/1/20
71. [Healthcare Infection Prevention and Control FAQs](#) Date: 4/1/20
72. [Considerations for School Closure](#) Date: 3/31/20
73. [Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/31/20
74. [Prepare your practice for COVID-19](#) Date: 3/31/20
75. [Travelers Prohibited from Entry to the United States](#) Date: 3/30/20
76. [Public Health Recommendations after Travel-Associated COVID-19 Exposure](#) Date: 3/30/20
77. [Interim Additional Guidance for Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Outpatient Hemodialysis Facilities](#) Date: 3/30/20
78. [Public Health Recommendations for Community-Related Exposure](#) Date: 3/30/20
79. [Screening Clients at Entry to Homeless Shelters](#) Date: 3/30/20
80. [Phone Advice Line Tool for possible COVID-19 patients](#) Date: 3/30/20
81. [Get Your Home Ready](#) Date: 3/27/20
82. [Travelers Returning from Cruise Ship and River Cruise Voyages](#) Date: 3/27/20
83. [Triage of Suspected COVID-19 Patients in non-US Healthcare Settings](#) Date: 3/27/20
84. [Collection and Submission of Postmortem Specimens from Deceased Persons with Known or Suspected COVID-19, March 2020 \(Interim Guidance\)](#) Date: 3/25/20
85. [Alternate Care Sites and Isolation Sites](#) Date: 3/25/20
86. [Mitigation Strategies for Communities](#) Date: 3/24/20

88. [Interim guidance for homeless service providers to plan and respond to coronavirus disease 2019 \(COVID-19\)](#) Date: 3/24/20
89. [Interim Guidance for Administrators and Leaders of Community- and Faith-Based Organizations to Plan, Prepare, and Respond to Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/23/20
90. [Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings \(Interim Guidance\)](#) Date: 3/23/20
91. [Interim Guidance on Management of Coronavirus Disease 2019 \(COVID-19\) in Correctional and Detention Facilities](#)
92. Date: 3/23/20
93. [Responding to Coronavirus Disease 2019 \(COVID-19\) among People Experiencing Unsheltered Homelessness](#) Date: 3/22/20
94. [Completing the Person Under Investigation \(PUI\) and Case Report Form](#) Date: 3/21/20
95. [Completing the Person Under Investigation \(PUI\) and Case Report Form](#)
96. [Information for Clinicians on Therapeutic Options for Patients with COVID-19](#) Date: 3/21/20
97. [Information for Clinicians on Therapeutic Options for Patients with COVID-19](#) Date: 3/21/20
98. [Preparing for COVID-19: Long-term Care Facilities, Nursing Homes](#) Date: 3/21/20
99. [Information for Health Departments on Reporting Cases of COVID-19](#) Date: 3/21/20
100. [Blood and Plasma Collection](#) Date: 3/21/20
101. [Preventing the Spread of COVID-19 in Retirement Communities and Independent Living Facilities \(Interim Guidance\)](#) Date: 3/20/20
102. [Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/20/20
103. [Steps Healthcare Facilities Can Take Now to Prepare for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/20/20
104. [Strategies to Allocate Ventilators from Stockpiles to Facilities](#) Date: 3/20/20
105. [03/04/2020: Lab Alert: COVID-19 Public Health Reporting for Laboratories that Develop or Use Laboratory Developed Tests with Intent to Obtain EUA](#) Date: 3/20/20
106. [02/18/2020: Lab Advisory: Reminder: COVID-19 Diagnostic Testing](#) Date: 3/20/20
107. [Interim Guidance for Administrators of US K-12 Schools and Child Care Programs](#) Date: 3/19/20
108. [Interim Guidance for Administrators of US Institutions of Higher Education](#) Date: 3/18/20
109. [Pregnancy & Breastfeeding](#) Date: 3/17/20
110. [Strategies for Optimizing the Supply of Eye Protection](#) Date: 3/17/20
111. [Strategies for Optimizing the Supply of Facemasks](#) Date: 3/17/20
112. [Strategies for Optimizing the Supply of Isolation Gowns](#) Date: 3/17/20
113. [Global Cruise Ship Travel Health Notice](#) Date: 3/17/20
114. [Interim Guidance for Public Health Professionals Managing People With COVID-19 in Home Care and Isolation Who Have Pets or Other Animals](#) Date: 3/16/20

115. [Discontinuation of In-Home Isolation for Immunocompromised Persons with COVID-19 \(Interim Guidance\)](#) Date: 3/16/20
116. [Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 \(Interim Guidance\)](#) Date: 3/16/20
117. [Get Your Mass Gatherings or Large Community Events Ready](#) Date: 3/14/20
118. [Evaluating and Testing Persons for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/14/20
119. [What Law Enforcement Personnel Need to Know about Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/14/20
120. [Healthcare Supply of Personal Protective Equipment](#) Date: 3/14/20
121. [Interim Guidance for Public Health Personnel Evaluating Persons Under Investigation \(PIUs\) and Asymptomatic Close Contacts of Confirmed Cases at Their Home or Non-Home Residential Settings](#) Date: 3/14/20
122. [Get Your Clinic Ready for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/11/20
123. [Recommendations for Election Polling Locations](#) Date: 3/10/20
124. [What Healthcare Personnel Should Know about Caring for Patients with Confirmed or Possible COVID-19 Infection](#) Date: 3/10/20
125. [Interim Guidance for Emergency Medical Services \(EMS\) Systems and 911 Public Safety Answering Points \(PSAPs\) for COVID-19 in the United States](#) Date: 3/10/20
126. [Guidance for Institutions of Higher Education with Students Participating in International Travel or Study Abroad Programs](#) Date: 3/10/20
127. [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease \(COVID-19\)](#) Date: 3/07/20
128. [Disinfecting your home if someone is sick](#) Date: 3/06/20
129. [Preventing the Spread of Coronavirus Disease 2019 in Homes and Residential Communities](#) Date: 3/06/20
130. [Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response](#) Date: 3/06/20
131. [Interim Guidance: Public Health Communicators Get Your Community Ready for Coronavirus Disease 2019 \(COVID-19\)](#) Date: 3/01/20
132. [Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of COVID-19 in the United States](#) Date: 2/29/20
133. [Healthcare Professional Preparedness Checklist for Transport and Arrival of Patients with Confirmed or Possible COVID-19](#) Date: 2/21/20
134. [Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019](#) Date: 2/18/20
135. [Maritime Resources](#) Date: 2/13/20

PDF FILLABLE TEMPLATE

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DEFINITIONS⁴⁵

1. Body Mass Index (BMI)-is an indicator of body fatness. Is a person's weight in kilograms divided by the square of height in meters.
2. Acceptable risk - that appears tolerable to some group. Risk that has minimal or long-term detrimental effects or for which the benefits outweigh the potential hazards.
3. Active Workforce - workforce composed of any employee that is not working from home.
4. Acute - a health effect: sudden onset, often brief; sometimes loosely used to mean severe: an exposure: brief, intense, or short-term; sometimes specifically referring to a brief exposure of high intensity. A short term, intense health effect.⁴⁶
5. Acute Respiratory Distress Syndrome (ARDS) - occurs when fluid builds up in the tiny, elastic air sacs (alveoli) in the lungs. The fluid keeps the lungs from filling with enough air, which means less oxygen reaches the bloodstream. This deprives organs of the oxygen they need to function.
6. Age standardization - a procedure for adjusting rates (e.g., death rates) designed to minimize the effects of differences in age composition in comparing rates for different populations
7. Agent - a factor, such as a microorganism, chemical substance, or form of radiation-whose presence, excessive presence, or relative absence is essential for the occurrence of a disease. A disease may have a single agent, a number of independent alternative agents (at least one of which must be present), or a complex of two or more factors whose combined presence is essential for the development of the disease.
8. Antibody - protein molecule produced in response to exposure to a "foreign" or extraneous substance (e.g., invading microorganisms responsible for infection) or active immunization. May also be present as a result of passive transfer from mother to infant, via immune globulin, etc. Antibody has the capacity to bind specifically to the foreign substance (antigen) that elicited its production, thus supplying a mechanism for protection against infectious diseases.
9. Antibody - a protein found in the blood that is produced in response to foreign substances (e.g., bacteria or viruses) invading the body. Antibodies protect the body from disease by binding to these organisms and destroying them.⁴⁷

⁴⁵ A Dictionary of Epidemiology, Fifth Edition, Porta et al, Oxford University Press 2008, Available from: http://www.academia.edu/Biology/Microbiology/Epidemiology/PDF/Dictionary_of_Epidemiology_5th_Ed.pdf

⁴⁶ CDC Vaccines & Immunizations Glossary, Available from: <https://www.cdc.gov/vaccines/terms/glossary.html>

⁴⁷ CDC Vaccines & Immunizations Glossary, Available from: <https://www.cdc.gov/vaccines/terms/glossary.html>

10. Bacteria - single-celled organisms found throughout nature, which can be beneficial or cause disease.
11. Behavioral Risk Factor - a characteristic or behavior that is associated with increased probability of a specified outcome; the term does not imply a causal relationship
12. Burden of disease - the impact of disease in a population.
13. Carrier - a person or animal harboring a specific infectious agent in the absence of discernible clinical disease and serves as a potential source of infection
14. Case - a particular disease, health disorder, or condition under investigation found in an individual or within a population or study group. As often non-strictly used in the health sciences, a person having a particular disease, disorder, or condition (e.g., a case of cancer, a case in a case-control study). A variety of criteria may be used to identify cases, e.g., individual physicians' diagnoses, registries and notifications, abstracts of clinical records, surveys of the general population, population screening, and reporting of defects, as in a dental record. The epidemiological definition of a case is not necessarily the same as the ordinary clinical definition.
15. Imported Case - in infectious disease epidemiology, a case that has entered a region by land, sea, or air transport, in contrast to one acquired locally.
16. Cleaning - is the removal of visible soil (e.g., organic and inorganic material) from objects and surfaces and normally is accomplished manually or mechanically using water with detergents or enzymatic products.⁴⁸
17. *Coronaviridae* - family of viruses encompasses a group of pathogens with zoonotic potential.
18. Coronavirus - any of a family (*Coronaviridae*) of single-stranded RNA viruses that have a lipid envelope studded with club-shaped projections, infect birds and many mammals including humans, and include the causative agents of MERS, SARS, and COVID-19.
19. COVID-19 - the name given by the World Health Organization (WHO) on February 11, 2020, for the disease caused by a Novel Coronavirus SARS-COV-2.
20. Concurrent disinfection - is the application of disinfective measures as soon as possible after the discharge of infectious material from the body of an infected person or after the soiling of articles with such infectious discharges, all personal contact with such discharges or articles being minimized prior to such disinfection.
21. Direct Contact Transmission- mode of transmission of infection between an infected host and a susceptible host. Direct contact occurs when skin or mucous surfaces touch, as in shaking hands, kissing, and sexual intercourse.
22. Indirect Contact Transmission - a mode of transmission of infection involving fomites or vectors. Vectors may be mechanical (e.g., fly or flea) or biological (when the disease agent undergoes part of its life cycle in the vector species).
23. Contagion - the transmission of infection by direct contact, droplet spread, or contaminated fomites.
24. Contagious - transmitted by contact.

⁴⁸ CDC Infection Control, Introduction, Methods, Definition of Terms. Available from: <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html>

25. Cumulative death rate - the proportion of a group that dies over a specified time interval. It is the incidence proportion of death.
26. Cumulative incidence, cumulative incidence rate - the number or proportion of a group (cohort) of people who experience the onset of a health-related event during a specified time interval; this interval
27. Data - a collection of items of information.
28. Death rate - an estimate of the portion of a population that dies during a specified period.
29. Determinant - any factor that brings about change in a health condition or other defined characteristic. Single specified causes. A determinant makes a difference to a given outcome.
30. Diagnosis - the process of determining health status and the factors responsible for producing it; may be applied to an individual, family, group, or community.
31. Direct transmission - direct and essentially immediate transfer of infectious agents to a receptive portal of entry through which human or animal infection may take place. This may be by direct contact such as touching, kissing, biting, or sexual intercourse or by direct projection (droplet spread) of droplet spray onto the conjunctiva or the mucous membranes of the eyes, nose, or mouth. It may also be by direct exposure of susceptible tissue to an agent in soil, compost, or decaying vegetable matter or by the bite of a rabid animal.
32. Disease - is the biological dimension of nonhealth, an essentially physiological dysfunction.
33. Disinfection - the killing of infectious agents outside the body by direct exposure to chemical or physical agents.
34. Dose - the amount of a substance available for interaction with metabolic processes or biologically significant receptors after crossing the relevant boundary (epidermis, gut, respiratory tract); the absorbed dose is the amount crossing a specific absorption barrier.
35. Effect the result of a cause.
36. Environment - all that which is external to the individual human host. Can be divided into physical, biological, social, cultural, etc., any or all of which can influence the health status of populations.
37. Epidemic - the occurrence in a community or region of cases of an illness, specific health-related behavior, or other health-related events clearly in excess of normal expectancy
38. Etiology - the science of causes, causality; in common usage, cause.
39. Evaluation - a process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in the light of their objectives.
40. Exposed- in epidemiology, the exposed group (or simply, the exposed) is often used to connote a group whose members have been exposed to a supposed cause of a disease or health state of interest or possess a characteristic that is a determinant of the health outcome of interest

a susceptible host through a suitable portal of entry. The agent may or may not have multiplied or developed in or on the vehicle before being transmitted.

57. Infection - The entry and development or multiplication of an infectious agent in the body of man or animals
58. Isolation- Separation, for the period of communicability, of infected persons or animals from others under such conditions as to prevent or limit the transmission of the infectious agent from those infected to those who are susceptible or who may spread the agent to others.
59. Middle East Respiratory Syndrome - (MERS) is an illness caused by a coronavirus called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Most MERS patients developed severe respiratory illness with symptoms of fever, cough, and shortness of breath.
60. Monitoring- The intermittent performance and analysis of measurements aimed at detecting changes in the health status of populations or in the physical or social environment.
61. Multiple risk- Where more than one risk factor for the development of a disease or other outcome is present and their combined presence results in an increased risk, we speak of "multiple risk." The increased risk may be due to the additive effects of the risks associated with the separate risk factors, or to synergism
62. N95 Respirator - A respiratory protective device designed to achieve a very close facial fit and very efficient filtration of airborne particles. The 'N95' designation means that when subjected to careful testing, the respirator blocks at least 95 percent of very small (0.3 micron) test particles. If properly fitted, the filtration capabilities of N95 respirators exceed those of face masks. However, even a properly fitted N95 respirator does not completely eliminate the risk of illness or death.⁴⁹
63. Negative study - Often taken to mean a study that fails to find evidence for an effect.
64. Non-Pharmaceutical Interventions - are actions, apart from getting vaccinated and taking medicine, that people and communities can take to help slow the spread of illnesses
65. Novel Coronavirus - A novel coronavirus is a new coronavirus that has not been previously identified.
66. Occurrence - In epidemiology, a general term describing the frequency of a disease or other attribute or event in a population; it does not distinguish between incidence and prevalence. The term is also used to allude to processes that lead to disease or that influence the incidence of disease.
67. Outbreak - An epidemic limited to localized increase in the incidence of a disease, e.g., in a village, town, or closed institution; upsurge is sometimes used as a euphemism for outbreak.
68. Pandemic - An epidemic occurring worldwide or over a very wide area, crossing international boundaries, and usually affecting a large number of people

⁴⁹ N95 respirators and Surgical masks. Available from <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-and-surgical-masks-face-masks#1>
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41. Factor - an event, characteristic, or other definable entity that leads to a change in a health condition or other defined outcome.
42. Guidelines - a formal statement about a defined task or function.
43. Heating, Ventilation, and Air Conditioning (HVAC) - the systems, machines, and technologies used in indoor settings such as homes, offices, and hallways, and transportation systems that need environmental regulation to improve comfort.
44. Host - a person or other living animal, including birds and arthropods, that affords subsistence or lodgment to an infectious agent under natural conditions. Some protozoa and helminths pass successive stages in alternate hosts of different species. Hosts in which the parasite attains maturity or passes its sexual stage are primary or definitive hosts; those in which the parasite is in a larval or asexual state are secondary or intermediate hosts. A transport host is a carrier in which the organism remains alive but does not undergo development.
45. Hygiene - The principles and laws governing the preservation of health and their practical application. Practices conducive to good health.
46. Acquired Immunity - Resistance acquired by a host as a result of previous exposure to a natural pathogen or foreign substance for the host, e.g., immunity to measles resulting from a prior infection with measles virus
47. Active Immunity - developed in response to stimulus by an antigen (infecting agent or vaccine) and usually characterized by the presence of antibody produced by the host.
48. Natural Immunity- Species-determined inherent resistance to a disease agent, e.g., resistance of humans to the virus of canine distemper.
49. Passive Immunity- Immunity conferred by an antibody produced in another host and acquired naturally by an infant from its mother or artificially by administration of an antibody-containing preparation (antiserum or immune globulin).
50. Specific Immunity - A state of altered responsiveness to a specific substance acquired through immunization or natural infection. For certain diseases (e.g., measles, chickenpox), this protection generally lasts for the life of the individual.
51. Immunity - Protection against a disease.
52. Incidence - The number of instances of illness commencing, or of persons falling ill, during a given period in a specified population. More generally, the number of new health-related events in a defined population within a specified period of time. It may be measured as a frequency count, a rate, or a proportion.
53. Incidence rate- The rate at which new events occur in a population.
54. Incubation period - The time interval between invasion by an infectious agent and appearance of the first sign or symptom of the disease in question
55. Index - a rating scale, e.g., a set of numbers derived from a series of observations of specified variables.
56. Indirect transmission - Vehicle-borne: Contaminated inanimate material or objects (fomites) such as toys, handkerchiefs, soiled clothes, bedding, cooking or eating utensils, and surgical instruments or dressings (indirect contact); water, food, milk; biological products including blood, serum, plasma, tissues, or organs; or any substance serving as an intermediate means by which an infectious agent is transported and introduced into

69. Parasite - An animal or vegetable organism that lives on or in another and derives its nourishment therefrom.
70. Pathogen - An organism capable of causing disease.
71. Population - All the inhabitants of a given country or area considered together; the number of inhabitants of a given country or area
72. Population attributable risk (PAR) - This term is sometimes used as a synonym for attributable fraction (population). It is also used for the difference of the population rate or risk of disease and the rate or risk in the unexposed.
73. Person Under Investigation (PUI) - Any person who is currently under investigation for having the virus that causes COVID-19, or who was under investigation but tested negative for the virus
74. Polymerase Chain Reaction (PCR) test - laboratory method to detect microbial pathogens in clinical specimens, used when pathogens are difficult to culture in vitro or. Require a long cultivation period.
75. Public Health Emergency of International Concern - is an extraordinary event which is determined, to constitute a public health risk to other States through the international spread of disease; and, to potentially require a coordinated international response. It implies a situation that is serious, unusual or unexpected; carries implications for public health beyond the affected State's national border; and may require immediate international action⁵⁰.
76. Prevalence - The number of disease cases (new and existing) within a population over a given period. A measure of disease occurrence: the total number of individuals who have an attribute or disease at a particular time (it may be a particular period) divided by the population at risk of having the attribute or disease at that time or midway through the period.
77. Prevention- Actions that prevent disease occurrence. Actions aimed at eradicating, eliminating, or minimizing the impact of disease and disability, or if none of these is feasible, retarding the progress of disease and disability.
78. Quantiles - Divisions of a distribution into equal, ordered subgroups.
79. Quarantine- Restriction of the activities of well persons or animals who have been exposed to a case of communicable disease during its period of communicability (i.e., contacts) to prevent disease transmission during the incubation period if infection should occur.
80. Real-time RT- polymerase chain reaction (rRT-PCR) test - test for the detection of the SARS-CoV-2 virus (the virus that causes COVID-19) in respiratory specimens.
81. Relative risk - the number of events in a group divided by the total number of subjects in that group.
82. Ribonucleic Acid - (RNA) is one of the three major biological macromolecules that are essential for all known forms of life (along with DNA and proteins).
83. Risk - The probability that an event will occur, e.g., that an individual will become ill or die within a stated period of time or by a certain age.

⁵⁰ WHO. Strengthening health security by implementing International Health Regulations (2005) Available from: <https://www.who.int/hr/procedures/ihrc/en/>
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84. Risk assessment - The qualitative or quantitative estimation of the likelihood of adverse effects that may result from exposure to specified health hazards or from the absence of beneficial influences. Risk assessment uses clinical, epidemiologic, toxicologic, environmental, and any other pertinent data. The process of determining risks to health attributable to environmental or other hazards. The process consists of four steps: Hazard identification: Identifying the agent responsible for the health problem, its adverse effects, the target population, and the conditions of exposure. Risk characterization: Describing the potential health effects of the hazard, quantifying dose-effect and dose-response relationships. Exposure assessment: Quantifying exposure (dose) in a specified population based on measurement of emissions, environmental levels of toxic substances, biological monitoring, etc. Risk estimation: Combining risk characterization, dose-response relationships, and exposure estimates to quantify the risk level in a specific population. The end result is a qualitative and quantitative statement about the health effects expected and the proportion and number of affected people in a target population, including estimates of the uncertainties involved. The size of the exposed population must be known.
85. Risk factor- An aspect of personal behavior or lifestyle, an environmental exposure, or an inborn or inherited characteristic that, on the basis of scientific evidence, is known to be associated with meaningful health-related condition(s).
86. Risk management- The steps taken to alter (i.e., reduce) the levels of risk to which an individual or a population is subject. The managerial, decision-making, and active hazard control process to deal with environmental agents of disease, such as toxic substances, for which risk evaluation has indicated an unacceptably high level of risk. The process consists of three steps: 1. Risk evaluation: Comparison of calculated risks or public health impact of exposure to an environmental agent with the risks caused by other agents or societal factors and with the benefits associated with the agent as a basis for deciding what is an acceptable risk. 2. Exposure Control: Actions taken to keep exposure below an acceptable maximum limit. 3. Risk Monitoring: The process of measuring reduction in risk after exposure control actions have been taken in order to reassess risks and initiate further control measures if necessary
87. Severe Acute Respiratory Syndrome (SARS)- a viral respiratory illness caused by a coronavirus called SARS-associated coronavirus (SARS-CoV).
88. Serology Test - a test that measures the number of antibodies or proteins present in the blood when the body is responding to a specific infection, like COVID-19.
89. Social Distancing Measures - Measures that aim to reduce the frequency of contact and increase the physical distance between persons, thereby reducing the risks of person-to-person transmission³¹.
90. Strategy- In public health, a set of essential measures (e.g., social, sanitary, environmental) proven to be effective or efficient to control a health problem.

91. Surgical mask- is a loose-fitting, disposable device that creates a physical barrier between the mouth and nose of the wearer and potential contaminants in the immediate environment⁵²
92. Surveillance -Systematic and continuous collection, analysis, and interpretation of data, closely integrated with the timely and coherent dissemination of the results and assessment to those who have the right to know so that action can be taken. It is an essential feature of epidemiological and public health practice.
93. Sustainability - The ability to continue economic, social, cultural, and environmental aspects of human society and the nonhuman environment
94. Terminal disinfection- is the application of disinfective measures after the patient has been removed by death or to a hospital, or has ceased to be a source of infection, or after other hospital isolation practices have been discontinued. Terminal disinfection is rarely practiced; terminal cleaning generally suffices, along with airing and sunning of rooms, furniture, and bedding. Disinfection is necessary only for diseases spread by indirect contact; steam sterilization or incineration of bedding and other items is desirable after a disease such as plague or anthrax.
95. Transmission of infection- Any mechanism by which an infectious agent is spread from a source or reservoir to another person.
96. Universal precautions- Procedures to be followed when health workers anticipate the possibility of infection by a patient who may harbor a highly contagious, dangerous pathogen. Universal precautions may include segregation of the patient in a private room; use of gloves, gown, mask, Perspex shield (eye protection); and rigorous attention to ensuring that no blood or other body fluid from such a patient can come into contact with the skin or mucous membranes of the health care worker
97. Virus - A microorganism composed of a piece of genetic material (RNA or DNA) surrounded by a protein coat. To replicate, a virus must infect a living cell. Viruses can reproduce only by entering a host cell and using the translational system of the cell to initiate the synthesis of viral proteins and to undergo replication.
98. Zoonosis- An infection or infectious disease transmissible under natural conditions from vertebrate animals to humans. Examples include rabies and plague.

ACRONYMS

1. ARDS: Acute Respiratory Distress Syndrome
2. BMI: Body Mass Index
3. CDC: Centers for Disease Control and Prevention
4. COVID-19: Coronavirus Disease of 2019
5. EUA: Emergency Use Utilization
6. EPA: Environmental Protection Agency
7. FDA: Food and Drug Administration

³¹ Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures , Volume 26, Number 5—May 2020
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⁵² N95 respirators and Surgical masks, Available from: <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-and-surgical-masks-face-masks#1>

8. GDP Gross domestic product.
9. HVAC: Heating, Ventilation and Air Conditioning
10. JOICP: Joint Operational Catastrophic Incident Plan
11. NIH National Institutes of Health (United States)
12. NIOSH National Institute for Occupational Safety and Health (United States) (www.niosh.gov).
13. NPI's: Non-Pharmaceutical Interventions
14. OSHA: Occupational Safety and Health Administration
15. PAR: Population Attributable Risk
16. PCR: Polymerase Chain Reaction
17. PROSHA: Puerto Rico Occupational Safety and Health Administration
18. PUI: Person Under Investigations
19. rRT-PCR: Real-time polymerase chain reaction
20. RNA: Ribonucleic Acid
21. SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2
22. WHO: World Health Organization

REFERENCES

12. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020, Available from: (<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>)
13. CDC Coronavirus Disease 2019 (COVID-19), Situation Summary. Available from: (<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html>)
14. PLANTILLA Plan de Continuidad de Operaciones ante una Pandemia para agencias, organizaciones y negocios, Departamento de Salud de PR, Rev Feb 2020
15. Critical preparedness, readiness and response actions for COVID-19, Interim Guidance , World Health Organization, 19 MARCH, 2020 (WHO/2019m-CoV/Community Actions/2020.3, Available from: (<https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19>)
16. CDC, Middle East Respiratory Syndrome (MERS), Available from: <https://www.cdc.gov/coronavirus/mers/index.html>
17. World Health Organization : Geneva, Q&A on coronaviruses (COVID-19), 8 April 2020/Q&A, Available from: <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>
18. Covid-19, SARS and MERS: are they closely related?, N. Petrosillo et al, Available from: <https://doi.org/10.1016/j.cmi.2020.03.026>
19. CDC, Human Coronavirus Types, Available from: (<https://www.cdc.gov/coronavirus/types.html>)
20. Adams MJ, Carstens EB. 2012. Ratification vote on taxonomic proposals to the International Committee on Taxonomy of Viruses (2012). Arch. Virol. 157:1411–1422. 10.1007/s00705-012-1299-6 Google Scholar

21. Coronavirus disease 2019, How it Spreads, Available from: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>
22. WHO, Strengthening health security by implementing International Health Regulations, 2005, Available from: <https://www.who.int/ihr/procedures/pheic/en/>
23. Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings-Social Distancing Measures, Volume 26, Number 5—May 2020
24. Guidelines Opening Up America Again, Available from <https://www.whitehouse.gov/openingamerica/>.
25. Porta et al, A Dictionary of Epidemiology, Fifth Edition, Porta et al, Oxford University Press 2008, Available from: http://www.academia.dk/BiologiskAntropologi/Epidemiologi/PDF/Dictionary_of_Epidemiology_5th_Ed.pdf
26. Guidance on Preparing Workplace for COVID 19, OSHA 3990-0320 Available from: <https://www.osha.gov/Publications/OSHA3990.pdf>
27. Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures, Volume 26, Number 5—May 2020
28. N95 respirators and Surgical masks, Available from: <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-and-surgical-masks-face-masks#1>
29. WHO, Strengthening health security by implementing International Health Regulations (2005) Available from: <https://www.who.int/ihr/procedures/pheic/en/>
30. CDC Vaccines & Immunizations Glossary, Available from : <https://www.cdc.gov/vaccines/terms/glossary.html>
31. CDC Infection Control, Introduction, Methods, Definition of Terms. Available from: <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html>
32. A Dictionary of Epidemiology, Fifth Edition, Porta et al, Oxford University Press 2008, Available from: http://www.academia.dk/BiologiskAntropologi/Epidemiologi/PDF/Dictionary_of_Epidemiology_5th_Ed.pdf
33. CERC in an infectious disease outbreak , April,28, 2020 Available from: https://emergency.cdc.gov/cerc/resources/pdf/315829-A_FS_CERC_Infectious_Disease.pdf
34. WHO Risk Communication and Community engagement guidelines April 28,2020 Available from: <https://www.who.int/publications-detail/responding-to-community-spread-of-covid-19>
35. "Uso de las Pruebas de COVID-19 en el Ambiente Laboral" Revision, April 25, 2020 Available from: <https://covid19f.rcm.upr.edu/wp-content/uploads/sites/45/2020/04/Usode-Pruebas-en-Ambiente-Laboral-Abril-26-20.pdf>

SUMMARY OF CHANGES

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Change: Cover page, page 1
Change: Re-Activation for Re-Opening
Add: Reviewers, page 3
Add: Introduction, page 4
Add: Self Certification Submission Requirement, Page 3
Add: Condition for Re-Opening After Self Certification Submission, Page 3
Add: OSHA General Guidance, Page 4
Modify: Symptoms Grouping as Per CDC Revised Guidelines, Page 9
Deleted: Based on the Incubation Period of MERS and SARS, Page 9
Add: Roles & Responsibilities Related to Self-Certification, Page 11
Add: Additional Descriptions on Table 1, 2, 3, Pages 12-15
Delete: Rapid Test as Criteria for Quarantine, Page 15
Add: Self Certification Requirement in Plan, Page 16
Modify: Risk Assessment and Exposure Control Measures Tool, Pages 20-22
Add: OSHA Statement on Risk Mitigation, Page 20
Change COVID Index Template Source, Page 23
Modify: COVID 19 Index Template, Pages 23-26
Add: Internal Communications Elements, Pages 27-28
Insert: Appendix 5 Covid-19 Tests Results Interpretation, Pages 30-31
Add: CDC Guidelines, Pages 33-34
Change: PDF Fillable Template Source, Page 38
Add: Definition of N95 Respirator, Page 42
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