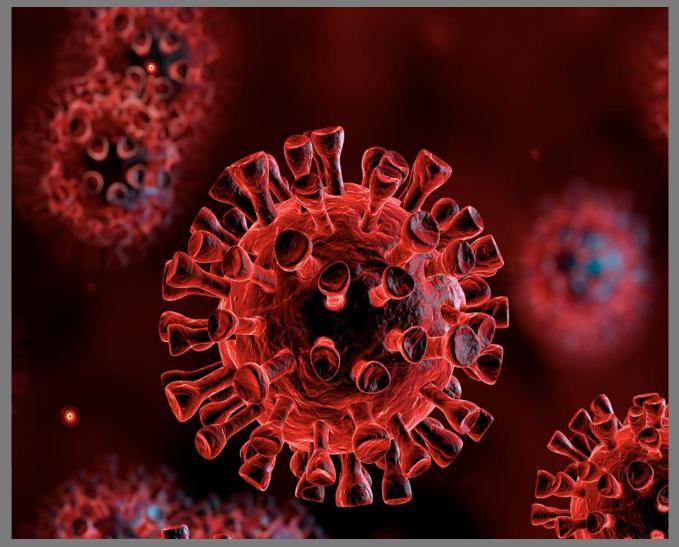
RE-ACTIVATION GUIDELINES

COVID -19 PRIVATE SECTOR



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Prepared for Puerto Rico Business Emergency Operations Center COVID-19 Puerto Rico Economic Advisory Board



Version 12

Last Update: APRIL 22, 2020

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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 <u>parent company, affiliates, subsidiaries and other officers, directors, and employees</u> 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 adapt, 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.

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-Activation Criteria

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

Re-activation of any company in Puerto Rico, requires the development and implementation of a COVID-19 Business Re-Activation 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 to ensure there is a mechanism in place to update the COVID-19 Business Re-Activation 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-Activation 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 daily report to the Puerto Rico Occupational Safety and Health Administration 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 as requested by Puerto Rico Department of Labor and or the Puerto Rico Occupational Safety and Health Administration

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

COVID -19 RE-ACTIVATION GUIDELINES

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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 unprecedent 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 **co**rona**v**irus **d**isease of 20**19** 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.¹

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 preexisting immunity against the new virus, it spreads worldwide.² For this to happen, the virus must be able to infect people and, the spread of person to person must be efficient and sustained.³

On March 19, 2020, WHO⁴ 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:

¹ 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) ² CDC Coronavirus Disease 2019 (COVID-19), Situation Summary.), Available from: (https://www.cdc.gov/coronavirus/2019-ncov/casesupdates/summary.html)

³ PLANTILLA Plan de Continuidad de Operaciones ante una Pandemia para agencias, organizaciones y negocios, Departamento de Salud de PR, Rev Feb 2020

⁴Critical 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: (<u>https://www.who.int/publications-detail/critical-preparedness-readiness-</u> and-response-actions-for-covid-19)

- Slow and stop transmission, prevent outbreaks, and delay spread
- Provide optimized care for all patients, especially the seriously ill
- 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.⁵ 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 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 (DHS), 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-activation model that considers critical economic indicators and health system capacity criteria. The model is intended to provide guidance for the orderly re-activation 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-activation 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-activation is granted.

⁵ Boletín administrativo Núm. OE2020-020, 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: (<u>https://www.estado.pr.gov/en/executive-orders/</u>)

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-activate 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.

ABOUT COVID-196

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 Syndrome⁷ (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19.⁸ 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).⁹ Coronaviruses are named for the crown-like spikes on their surface. There are four genera of the coronaviruses, known as alpha, beta, gamma, and delta.¹⁰ 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 (based on the incubation period of MERS and SARS.¹¹

- Fever
- Cough
- Shortness of breath or difficulty breathing
- Chills
- Repeated shaking with chills

⁶ COVID-19 information is constantly evolving, therefore; it is strongly recommended to seek additional safety, medical and epidemiologic 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).

⁷ CDC, Middle East Respiratory Syndrome (MERS), Available from: <u>https://www.cdc.gov/coronavirus/mers/index.html</u>

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

⁹ COVID-19, SARS, and MERS: are they closely related?, N. Petrosillo et all, Available from: <u>https://doi.org/10.1016/j.cmi.2020.03.026</u> ¹⁰ CDC, Human Coronavirus Types, Available from: (<u>https://www.cdc.gov/coronavirus/types.html</u>)

¹¹ CDC Coronavirus Disease 2019 (COVID-19 Symptoms of Coronavirus Available from : <u>https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html</u>

- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell

The list of symptoms is not all-inclusive; therefore, CDC recommends consulting a medical provider for any symptoms of concern.

HOW COVID-19 SPREADS

According to CDC guidelines¹² 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.
- By people who are not showing symptoms.

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.¹³

RE-ACTIVATION 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:

1. 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-Activation Plan as new OSHA, PROSHA, or CDC guidelines are published.

¹² Coronavirus disease 2019, How it Spreads, Available from: <u>https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html</u>

¹³ Guidance on Preparing Workplace for COVID -19, OSHA 3990-03 2020 available from <u>https://www.osha.gov/Publications/OSHA3990.pdf</u>

- 2. 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-Activation Plan developed by the Company.
- 3. It is the responsibility of the Company's highest-ranking official based in Puerto Rico to maintain a list of all the active employees.
- 4. It is the responsibility of the Company's highest-ranking official based in Puerto Rico to submit a daily report to the Puerto Rico Occupational Safety and Health Administration 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 as requested by Puerto Rico Department of Labor and or the Puerto Rico Occupational Safety and Health Administration
- 5. It is the responsibility of the Company's highest-ranking official based in Puerto Rico to approve the Business Re-Activation Plan.

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.

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-Ph	armaceutical	Interventions
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	NON-PHARMACEUTICAL INTERVENTIONS DESCRIPTION
Employee Related Controls	
Family Nucleus Exposure Risk	Actions aimed to mitigate the impact associated to employees exposure to family members that work in high risk jobs as defined in page 16 FAMILY NUCLEUS EXPOSURE:
Community Exposure Risks	Actions aimed to mitigate the impact associated to community exposure as defined in page 17 GEOGRAPHICAL EXPOSURE
Age Bracket Risks	Actions aimed to provide special accommodations for personnel who are over 65 years old.

Underlying Medical Conditions Risks Workplace Related and Engineering	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
Controls	
Facility Occupancy	Actions aimed to reduce the occupancy of working areas, and buildings as compared to approved building capacity provided in the operational permits.
Use of Common Areas	Actions aimed to close or minimize the use of common areas where personnel are likely to congregate and interact.
HVAC Modifications	Actions aimed to modify the number of air changes or to increase the volume of air in working rooms for facilities with HVAC units.
Contact Surfaces Cleaning, Concurrent Disinfection	Actions aimed to modify and increase the cleaning and disinfection procedures.
Personal Hygiene Practices	Actions aimed to promote and increase hand washing practices, either with soap and water or using hand sanitizers, especially after touching frequently used items or surfaces.
Client Exposure	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.
Surveillance and Employee Protection Controls ¹⁴	
Employee Surveillance Controls	Actions aimed to implement surveillance practices such as daily temperature check.
Personal Protection Equipment (PPE) Controls	Actions aimed to require and provide personal protection equipment, including but not limited to masks, respirators, gloves, eye protection to employees.

¹⁴ Guidelines Opening Up America Again, Available from <u>https://www.whitehouse.gov/openingamerica/</u>

Social Distancing Controls¹⁵

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 S	ocial Dist	tancina	Controls

	SOCIAL DISTANCING CONTROLS DESCRIPTION
Work layouts modifications	Actions aimed to increase distance between
	coworkers' clients and service providers in a working
	area.
Physical areas demarcation	Actions aimed to provide a visual signal to maintain
	distance between co-workers, clients and service
	providers in a working area.
Physical barriers	Installation of physical barriers to minimize direct
	contact, such as plastic shields or glasses in service
	counters and offices.
Use of shared equipment	Actions aimed to minimize the use of shared
(telephones, chairs, working	equipment.
tables) modifications	
Work hours modifications	Actions aimed to reduce the facility occupancy.
Flexible work plan modifications	Actions aimed to reduce number of active workers.
(ex. work from home)	
Work from home protocol for	Protocols describing the special accommodations for
personnel who are members of a	personnel who are members of a vulnerable
vulnerable population.	population.
Common areas layouts	Actions aimed to increase distance between
modifications	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

	ADMINISTRATIVE CONTROLS DESCRIPTION
COVID-19 Illness Notification	Development and implementation of guideline or
Protocol	procedure.
COVID-19 Person Under	Development and implementation of guideline or
Investigation Isolation Protocol	procedure.

¹⁵ Guidelines Opening Up America Again, Available from <u>https://www.whitehouse.gov/openingamerica/</u>

	· · · · · · · · · · · · · · · · · · ·
COVID-19 Visuals Aids	Posting of COVID 19 Visual Aids
COVID -19 Employee Self-	Development and implementation of guideline or
Monitoring programs	procedure.
COVID -19 Employee Family	Development and implementation of guideline or
Monitoring Program	procedure.
COVID -19 Management of Breaks	Development and implementation of guideline or
and Food Periods	procedure.
COVID -19 Use of Common Areas	Development and implementation of guideline or
	procedure.
COVID -19 Risk Notification	Development and implementation of guideline or
	procedure.
COVID -19 Respiratory Etiquette	Development and implementation of guideline or
	procedure.
COVID -19 Hand Washing	Development and implementation of guideline or
	procedure.
COVID -19 Remote Meeting	Development and implementation of guideline or
Management	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	Maintain documented evidence of employee and
new protocols and procedures	contractors training.
COVID-19 Workforce Contact	Development and implementation of guideline or
Tracing	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 or a positive serology, namely rapid test result, for COVID-19.
- 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.
- 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: 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 in 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-Activation Plan developed by the Company.

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-Activation 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-Activation Plan.

APPENDIX

Appendix 1: Risk Assessment and Exposure Control Measures Tool

Risk Assessment

The Security 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 20¹⁶.

- 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 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.

¹⁶ Guidance on preparing workplace for COVID-19, OSHA 3990-03-20

- 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 cases in the upper quantile of PR case distribution.
- 2. MEDIUM RISK: Any active employee residing in a municipality with positive cases within the upper and lower quantile of PR case distribution.
- 3. LOW RISK: Any active employee residing in a municipality with positive cases 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 years¹⁷
- 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, ensuring disclosure of any health condition complies 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%
 - b. MEDIUM RISK: 50-79%
 - c. LOW RISK: <50%
 - 2. Use of Common Areas; (Cafeteria, Restrooms, Locker rooms, Conference Rooms, dining areas, etc.)
 - a. HIGH RISK: Common areas open.
 - b. MEDIUM RISK: Common areas open with physical barriers and access control.
 - 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 station.
 - b. LOW RISK: Hand wash stations are provided for employees only.
 - c. LOW RISK: Hand wash stations are available employees and customers.

¹⁷ CDC Underlying Conditions: Available from: <u>https://www.cdc.gov/coronavirus/2019-ncov/hcp/underlying-conditions.html</u>

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 MEASURES

The Security Index considers the exposure mitigation measures weight is as follows:

High: 10 Medium: 5 Low: 1

I. Employee Exposure Control, Monitoring, and Surveillance Measures: HIGH

- 1. Surveillance Programs¹⁸
 - a. Daily Temperature Checks for Active Workforce.
 - b. Contract Tracing Program for COVID-19 positive test results.
- 2. Monitoring Programs
 - a. FDA Approved Serology (Fast Test) test before Active Workforce Re-Activation.
 - b. PCR test for any positive serology test result before Active Workforce Re-Activation.
 - c. PCR test before return to work after an internal quarantine activation.
- 3. Exposure Control ¹⁹
 - Use of N95 Respirator complying with OSHA respiratory protection standards 29 CFR § 1910.134(f)(2) and OSHA Temporary Enforcement Guidance.²⁰
 - b. Surgical Mask
 - c. Safety Glasses
 - d. Use of Plastic Face Shield
 - e. Use of Gloves
- 4. Increase availability of hand rub dispensers regularly refilled with hand sanitizer.²¹

¹⁸ Guidelines for Opening Up America Again Available from: <u>https://www.whitehouse.gov/openingamerica/</u>

¹⁹ Guidelines for Opening Up America Again Available from: <u>https://www.whitehouse.gov/openingamerica/</u>

²⁰ OSHA Temporary Enforcement Guidance-Healthcare Respiratory Protection Annual Fit-Testing for N95 Filtering facepieces During COVID-19 outbreak. Available from: <u>https://www.osha.gov/memos/2020-03-14/temporary-enforcement-guidance-healthcare-respiratory-protection-annual-fit</u>

²¹ WHO, Getting your workplace ready for COVID-19 Available from: <u>https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf</u>

II. Social Distancing Measures: HIGH²²

- 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 Pregnant Women

III. Employee Exposure, Engineering and Environmental Measures: HIGH

- 1. Physical Barriers for Social Distancing (Perspex shields)
- 2. Environmental Controls: Increased cleaning frequency of contact surfaces (phones, keyboards, desk, tables)^{23,24}
- 3. Work Area Demarcation for Social Distancing

IV. Employee Exposure and Social Distancing Measures: MEDIUM

- 1. Exposure Control
- 2. Community Mask
- 3. Gowns
- 4. Booties
- 5. Work Layouts Modifications for Social Distancing
- 6. Common Areas Layouts Modifications for Social Distancing
- 7. Modifications in the Use of Shared Equipment

V. Administrative Measures: MEDIUM

- 1. Employee COVID-19 Training
- 2. Illness Notification Protocol
- 3. Employee Self-Monitoring Program
- 4. Employee Family Self-Monitoring Program
- 5. Respiratory Etiquette Training
- 6. Hand Washing Training
- 7. Facilities High Contact Surfaces Cleaning and Sanitation Protocols
- 8. Terminal Cleaning Protocol
- 9. Non-Essential Travel Protocol
- 10. Management of Common Facilities Protocol
- 11. Quarantine Management Protocol
- 12. Virtual Meeting Protocol
- 13. Management of Breaks and Food Periods Protocol

 ²² Guidelines for Opening Up America Again Available from: <u>https://www.whitehouse.gov/openingamerica/</u>
²³ WHO, Getting your workplace ready for COVID-19 Available from: <u>https://www.who.int/docs/default-source/coronaviruse/getting-</u>workplace-ready-for-covid-19.pdf

²⁴ Guidelines for Opening Up America Again Available from: <u>https://www.whitehouse.gov/openingamerica/</u>

VI. Administrative Measures: LOW

- 1. PUI Notification Protocol
- 2. Visuals
- 3. Risk Notification Protocol

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

- 1. Blood disorders (e.g., sickle cell disease or on blood thinners)
- 2. Chronic kidney disease as defined by your doctor. Patient has been told to avoid or reduce the dose of medications because kidney disease, or is under treatment for kidney disease, including receiving dialysis.
- 3. Chronic liver disease as defined by your doctor. (e.g., cirrhosis, chronic hepatitis) Patient has been told to avoid or reduce the dose of medications because liver disease or is under treatment for liver disease.
- 4. Compromised immune system (immunosuppression) (e.g., seeing a doctor for cancer and treatment such as chemotherapy or radiation, received an organ or bone marrow transplant, taking high doses of corticosteroids or other immunosuppressant medications, HIV or AIDS)
- 5. Current or recent pregnancy in the last two weeks
- 6. Endocrine disorders (e.g., diabetes mellitus)
- 7. Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
- 8. Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
- 9. Lung disease including asthma or chronic obstructive pulmonary disease (chronic bronchitis or emphysema) or other chronic conditions associated with impaired lung function or that require home oxygen
- 10. Neurological and neurologic and neurodevelopment conditions [including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury].
- 11. Severe Obesity (body mass index (BMI) of 40 or higher).

Appendix 3: COVID-19 Index Template

COVID-19 Index template is available at:

https://app.smartsheet.com/sheets/hmgV4Xv5qPh8MhFhwjPrx4c7rh7QmMrhMHh9gg61?view =grid

Table 4 COVID-19 Index

EVALUACIÓN DE FACTORES DE RIESGO Y MEDIDAS DE MITIGACION PARA ESTIMAR EL INDICE DE COVID-19 FACTORES DE RIESGO	MARQUE CON X LO QUE APLIQUE	Impacto
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 con condiciones de salud de riesgo a efectos serios de COVID-19 establecidas en las guías del CDC		10
Se mantienen empleadas activas embarazadas		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	1
particulado de alta eficiencia, sin recirculación	
Los empleados activos trabajan en cuartos con presión negativa.	1
Los empleados activos operan al aire libre sin sistema de ventilación	1
forzada.	
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	1
y clientes	
Los empleados activos están en contacto directo con los clientes para	10
proveer servicios o entregar productos	
Los empleados activos tienen algún nivel de contacto mínimo con los	5
clientes (existe facilidades de recogido por servi-carro o entrega	
domiciliaria)	
Los empleados activos no tienen contacto directo con los clientes	1
MITIGACIÓN	
Se implemento una verificación diaria de temperatura a empleados	10
activos	
Se implemento un programa de rastreo de contacto o "Contact Tracing"	10
para empleados con resultados positivos	
Se hacen pruebas diagnosticas (serológicas) rápidas antes de comenzar	10
operaciones	
Se hacen pruebas moleculares a empleado con prueba rápida positiva	10
antes de comenzar operaciones	
Se hacen pruebas de PCR a todos los empleados activos luego de activarse	10
una cuarentena como resultado de un empleado activo resultar positivo a	
COVID-19 antes de reinstalarlos a el área de trabajo.	
Se provee respirador N95 a los empleados activos cumpliendo con los	10
requisitos de las guías de OSHA	
Se provee mascarilla quirúrgica a los empleados activos	10
Se provee protector de cara "Face Shield" a los empleados activos	10
Se provee espejuelos de seguridad/ Googles a los empleados activos	10
Se proveen guantes a los empleados activos	10
Se provee y se aumento la disponibilidad de dispensadores de sanitizador	10
de manos para el uso de los empleados activos	
Se colocaron barreras físicas para garantizar el distanciamiento social	10
Se implemento programa de trabajo desde el hogar para empleados sobre	10
65 anos	
Se implemento programa de trabajo desde el hogar para empleados con	10
condiciones de salud de riesgo según definidas por las guías del CDC	

Se implemento programa de trabajo desde el hogar para mujeres en estado de gestación	10
Se hicieron cambios al diseño en las áreas de trabajo para lograr	10
distanciamiento social	
Se aumento en la frecuencia de limpieza y desinfección de superficies de contacto	10
Se hizo demarcación física de áreas de trabajo para lograr distanciamiento social (6 pies)	10
Se provee mascarilla comunitaria a los empleados activos	5
Se proveen batas a los empleados activos	5
Se proveen cubre zapatos a los empleados activos	5
Se hicieron cambios a layouts en áreas de uso común para lograr distanciamiento social	5
Se hicieron modificaciones al uso de equipo común.	5
Se llevo a cabo capacitación de empleados en guías de operación para reducir impacto y propagación de COVID-19	5
Se tienen protocolo de comunicación de condiciones de salud asociadas a COVID-19	5
Se implementaron programas de auto cernimiento para empleados	5
Se implementaron programas de auto cernimiento 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 Implementaron políticas de reducción de viajes no esenciales	5
Se implementaron procedimiento para control del uso de facilidades comunes para mantener distanciamiento social	5
Se tienen un protocolo que requiere que se active cuarentena en caso de algún empleado activo confirmar resultados positivos a COVID 19	5
Se Implementaron procedimientos para conducir reuniones a distancia	5
Se implementaron procedimiento para manejo de periodos de toma de alimento y de "breaks" para mantener distanciamiento social	5
Se creo un protocolo para manejar a las personas bajo investigación de contagio de COVID-19	1
Se implemento el uso de visuales sobre higiene de manos y etiqueta respiratoria	1
Se implementaron procedimientos de notificación de riesgo a empleados	1
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-activation 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. Frequently Questions Asked Documents
- 5. Visual Aids (ex: CDC, WHO posters)

Internal Communications Elements

- 1. Center the communications content on ensuring the safety and security of the workforce.
- 2. Build Trust
- 3. Discuss all prevention and mitigation controls implemented and the associated risks.
- 4. Develop talking points to be used by all Company leaders
- 5. Establish a regular rhythm of communications
- 6. State clearly and in easy to follow language the facts
- 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)
- 8. Discuss COVID-19 specific policies and procedures
- 9. If remote work policies are established, share the Information regarding applicability, tools, and processes to be followed.
- 10. Provide detailed instructions about what employees should do if they suspect they have been exposed to COVID-19.
- 11. 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.
- 12. Consider including COVID-19 financial and supply chain impact, if any, on the company. Share relevant local and national situational summaries.

External Communications

- 1. Identify stakeholders: suppliers, clients, community, government agencies, regulators, union representatives, retirees.
- 2. Define communication channel
- 3. Identify Company spoke person and develop talking points.
- 4. Define communication frequency

Appendix 5: COVID-19 Printable Visual Aids

- 1. <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf</u>
- 2. <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs-sp.pdf</u>
- 3. <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms.pdf</u>
- 4. <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms-sp.pdf</u>
- 5. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/safe-greetings.png?sfvrsn=2e97004e_2</u>
- 6. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/handshaking.png?sfvrsn=4aed53c5_2</u>
- 7. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-communications/general-public/wearing-gloves.png?sfvrsn=ec69b46a_2</u>
- 8. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-3.jpg</u>
- 9. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-2.jpg</u>
- 10. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-ready-social-1.jpg</u>
- 11. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-smart-if-you-develop.jpg</u>
- 12. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-smart-inform.jpg</u>
- 13. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-safe.jpg</u>
- 14. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-support.jpg</u>
- 15. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-address-stigma.jpg</u>
- 16. <u>https://www.who.int/images/default-source/health-topics/coronavirus/social-media-squares/be-kind-to-address-fear.jpg</u>
- 17. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-</u> <u>communications/general-public/protect-yourself/blue-1.png?sfvrsn=3d15aa1c_2</u>
- 18. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-</u> <u>communications/general-public/protect-yourself/blue-2.png?sfvrsn=2bc43de1_2</u>
- 19. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-</u> <u>communications/general-public/protect-yourself/blue-3.png?sfvrsn=b1ef6d45_2</u>
- 20. <u>https://www.who.int/images/default-source/health-topics/coronavirus/risk-</u> <u>communications/general-public/protect-yourself/blue-4.png?sfvrsn=a5317377_11</u>
- 21. <u>https://www.who.int/images/default-source/health-topics/coronavirus/pregnancy-breastfeeding/who---pregnancy---1.png</u>
- 22. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-</u><u>1.png</u>

- 23. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-</u> 2.png
- 24. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-3.png</u>
- 25. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-</u> <u>4.png</u>
- 26. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-5.png</u>
- 27. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-6.png</u>
- 28. <u>https://www.who.int/images/default-source/health-topics/coronavirus/masks/masks-7.png</u>

Appendix 6: COVID-19 Educational Videos

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

Appendix 7: COVID-19 Myth Busters Visuals

- 1. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/eng-mythbusting-ncov-(15).png?sfvrsn=a8b9e94_2</u>
- 2. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-sun-exposure.tmb-768v.jpg?sfvrsn=658ce588_4</u>
- 3. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-breathing-exercice.tmb-768v.jpg?sfvrsn=db06f4a9_4</u>
- 4. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-</u> <u>busters/web-mythbusters/mb-breathing-exercice.tmb-768v.jpg?sfvrsn=db06f4a9_4</u>
- 5. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-alcohol.tmb-1920v.jpg?sfvrsn=19ea13fb_4</u>
- 6. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/52.tmb-1920v.png?sfvrsn=862374e_4</u>
- 7. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-cold-snow.tmb-1920v.png?sfvrsn=1e557ba_4</u>
- 8. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-hot-bath.tmb-1920v.png?sfvrsn=f1ebbc_4</u>

- 9. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mb-mosquito-bite.png?sfvrsn=a1d90f6_2</u>
- 10. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-27.png?sfvrsn=d17bc6bb_2</u>
- 11. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbusters-31.png</u>
- 12. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-25.png?sfvrsn=d3bf829c_4</u>
- 13. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbusters-33.png?sfvrsn=47bfd0aa_4</u>
- 14. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/11.png?sfvrsn=97f2a51e_4</u>
- 15. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/23.png</u>
- 16. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/19.png</u>
- 17. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbuster-2.png</u>
- 18. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/mythbuster-3.png</u>
- 19. <u>https://www.who.int/images/default-source/health-topics/coronavirus/myth-busters/web-mythbusters/mythbuster-4.png?sfvrsn=e163bada_8</u>

Appendix 8: CDC/WHO COVID-19 Related Guidelines ²⁵

- 1. <u>CDC's Laboratory Outreach Communication System (LOCS)</u>- Date 4/14/20
- 2. Strategies for Optimizing the Supply of N95 Respirators Date: 4/9/20
- 3. <u>Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus</u> <u>Disease 2019 (COVID-19)</u> Date: 4/9/20
- 4. <u>Decontamination and Reuse of Filtering Facepiece Respirators</u> Date: 4/9/20
- 5. <u>CDC's role in helping cruise ship travelers during the COVID-19 pandemic</u> Date: 4/9/20
- 6. <u>Use Personal Protective Equipment when caring for Patients with Confirmed or</u> <u>Suspected COVID</u> Date: 4/8/20
- 7. <u>Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons</u> <u>for Coronavirus Disease 2019 (COVID-19)</u> Date: 4/8/20
- 8. Dental Settings Date: 4/8/20
- 9. <u>COVID-19 Travel Recommendations by Country</u> Date: 4/7/20
- 10. Guidance for Building Water Systems Date: 4/7/20

²⁵ CDC Coronavirus Disease 2019(COVID-19) Available from: <u>https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance-list.html?Sort=Date%3A%3Adesc</u>

- 11. <u>Outpatient and Ambulatory Care Settings: Responding to Community Transmission of</u> <u>COVID-19 in the United States</u> Date: 4/7/20
- 12. People with Disabilities Date: 4/7/20
- 13. Information for Healthcare Professionals: COVID-19 and Underlying Conditions Date: 4/6/20
- 14. Considerations for Inpatient Obstetric Healthcare Settings Date: 4/6/20
- 15. <u>Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus</u> <u>Disease (COVID-19)</u> Date: 4/6/20
- 16. <u>Information for Healthcare Professionals: COVID-19 and Underlying Conditions</u> Date: 4/6/20
- 17. <u>Operational Considerations for the Identification of Healthcare Workers and Inpatients</u> with Suspected COVID-19 in non-US Healthcare Settings Date: 4/6/20
- 18. <u>Strategic Priority Infection Prevention and Control Activities for Non-US Healthcare</u> <u>Settings</u> Date: 4/6/20
- 19. Guidance for Childcare Programs that Remain Open Date: 4/6/20
- 20. Running Essential Errands Date: 4/6/20
- 21. Mitigate Healthcare Personnel Staffing Shortages Date: 4/6/20
- 22. <u>Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings</u> (Interim Guidance) Date: 4/4/20
- 23. Social Distancing, Quarantine, and Isolation Date: 4/4/20
- 24. Information for Pediatric Healthcare Providers Date: 4/3/20
- 25. <u>Human Infection with COVID-19 Person Under Investigation (PUI) and Case Report Form</u> Date: 4/1/20
- 26. Travelers Returning from International Travel Date: 4/1/20
- 27. <u>Cleaning and Disinfection for Community Facilities</u> Date: 4/1/20
- 28. <u>Interim Infection Prevention and Control Recommendations for Patients with Suspected</u> <u>or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings</u> Date: 4/1/20
- 29. Healthcare Infection Prevention and Control FAQs Date: 4/1/20
- 30. Considerations for School Closure Date: 3/31/20
- 31. <u>Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens</u> <u>Associated with Coronavirus Disease 2019 (COVID-19)</u> Date: 3/31/20
- 32. Prepare your practice for COVID-19 Date: 3/31/20
- 33. Travelers Prohibited from Entry to the United States Date: 3/30/20
- 34. <u>Public Health Recommendations after Travel-Associated COVID-19 Exposure</u> Date: 3/30/20
- 35. <u>Interim Additional Guidance for Infection Prevention and Control Recommendations for</u> <u>Patients with Suspected or Confirmed COVID-19 in Outpatient Hemodialysis Facilities</u>
- 36. Date: 3/30/20
- 37. Public Health Recommendations for Community-Related Exposure Date: 3/30/20
- 38. Screening Clients at Entry to Homeless Shelters Date: 3/30/20
- 39. Phone Advice Line Tool for possible COVID-19 patients Date: 3/30/20
- 40. <u>Get Your Home Ready</u> Date: 3/27/20 <u>Travelers Returning from Cruise Ship and River Cruise Voyages</u> Date: 3/27/20

- 41. Triage of Suspected COIVD-19 Patients in non-US Healthcare Settings Date: 3/27/20
- 42. <u>Collection and Submission of Postmortem Specimens from Deceased Persons with</u> <u>Known or Suspected COVID-19, March 2020 (Interim Guidance)</u> Date: 3/25/20
- 43. <u>Alternate Care Sites and Isolation Sites</u> Date: 3/25/20
- 44. <u>Mitigation Strategies for Communities</u> Date: 3/24/20
- 45. <u>Interim guidance for homeless service providers to plan and respond to coronavirus</u> <u>disease 2019 (COVID-19)</u> Date: 3/24/20
- 46. 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
- 47. <u>Discontinuation of Transmission-Based Precautions and Disposition of Patients with</u> <u>COVID-19 in Healthcare Settings (Interim Guidance)</u> Date: 3/23/20
- 48. Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities Date: 3/23/20
- 49. <u>Responding to Coronavirus Disease 2019 (COVID-19) among People Experiencing</u> <u>Unsheltered Homelessness</u> Date: 3/22/20
- 50. Completing the Person Under Investigation (PUI) and Case Report Form Date: 3/21/20
- 51. Completing the Person Under Investigation (PUI) and Case Report Form
- 52. Information for Clinicians on Therapeutic Options for Patients with COVID-19 Date: 3/21/20
- 53. Information for Clinicians on Therapeutic Options for Patients with COVID-19 Date: 3/21/20
- 54. Preparing for COVID-19: Long-term Care Facilities, Nursing Homes Date: 3/21/20
- 55. Information for Health Departments on Reporting Cases of COVID-19 Date: 3/21/20
- 56. Blood and Plasma Collection Date: 3/21/20
- 57. <u>Preventing the Spread of COVID-19 in Retirement Communities and Independent Living</u> <u>Facilities (Interim Guidance)</u> Date: 3/20/20
- 58. Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for Coronavirus Disease 2019 (COVID-19) Date: 3/20/20
- 59. <u>Steps Healthcare Facilities Can Take Now to Prepare for Coronavirus Disease 2019</u> (COVID-19) Date: 3/20/20
- 60. Strategies to Allocate Ventilators from Stockpiles to Facilities Date: 3/20/20
- 61. <u>03/04/2020: Lab Alert: COVID-19 Public Health Reporting for Laboratories that Develop</u> <u>or Use Laboratory Developed Tests with Intent to Obtain EUA</u> Date: 3/20/20
- 62. 02/18/2020: Lab Advisory: Reminder: COVID-19 Diagnostic Testing Date: 3/20/20
- 63. Interim Guidance for Administrators of US K-12 Schools and Child Care Programs Date: 3/19/20
- 64. Interim Guidance for Administrators of US Institutions of Higher Education Date: 3/18/20
- 65. Pregnancy & Breastfeeding Date: 3/17/20
- 66. Strategies for Optimizing the Supply of Eye Protection Date: 3/17/20
- 67. Strategies for Optimizing the Supply of Facemasks Date: 3/17/20
- 68. Strategies for Optimizing the Supply of Isolation Gowns Date: 3/17/20

- 69. Global Cruise Ship Travel Health Notice Date: 3/17/20
- 70. 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
- 71. <u>Discontinuation of In-Home Isolation for Immunocompromised Persons with COVID-19</u> (Interim Guidance) Date: 3/16/20
- 72. <u>Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected</u> <u>COVID-19 (Interim Guidance)</u> Date: 3/16/20
- 73. Get Your Mass Gatherings or Large Community Events Ready Date: 3/14/20
- 74. Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19) Date: 3/14/20
- 75. <u>What Law Enforcement Personnel Need to Know about Coronavirus Disease 2019</u> (COVID-19) Date: 3/14/20
- 76. Healthcare Supply of Personal Protective Equipment Date: 3/14/20
- 77. Interim Guidance for Public Health Personnel Evaluating Persons Under Investigation (PUIs) and Asymptomatic Close Contacts of Confirmed Cases at Their Home or Non-Home Residential Settings Date: 3/14/20
- 78. Get Your Clinic Ready for Coronavirus Disease 2019 (COVID-19) Date: 3/11/20
- 79. Recommendations for Election Polling Locations Date: 3/10/20
- 80. <u>What Healthcare Personnel Should Know about Caring for Patients with Confirmed or</u> <u>Possible COVID-19 Infection</u> Date: 3/10/20
- 81. <u>Interim Guidance for Emergency Medical Services (EMS) Systems and 911 Public Safety</u> <u>Answering Points (PSAPs) for COVID-19 in the United States</u> Date: 3/10/20
- 82. <u>Guidance for Institutions of Higher Education with Students Participating in</u> <u>International Travel or Study Abroad Programs</u> Date: 3/10/20
- 83. 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
- 84. Disinfecting your home if someone is sick Date: 3/06/20
- 85. <u>Preventing the Spread of Coronavirus Disease 2019 in Homes and Residential</u> <u>Communities</u> Date: 3/06/20
- 86. <u>Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-</u> <u>Designated Shelf Life: Considerations for the COVID-19 Response</u> Date: 3/06/20
- 87. <u>Interim Guidance: Public Health Communicators Get Your Community Ready for</u> <u>Coronavirus Disease 2019 (COVID-19)</u> Date: 3/01/20
- 88. <u>Interim Guidance for Healthcare Facilities: Preparing for Community Transmission of</u> <u>COVID-19 in the United States</u> Date: 2/29/20
- 89. <u>Healthcare Professional Preparedness Checklist for Transport and Arrival of Patients</u> with Confirmed or Possible COVID-19 Date: 2/21/20
- 90. Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019 Date: 2/18/20
- 91. Maritime Resources Date: 2/13/20

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DEFINITIONS²⁶

- 5. 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.
- 6. 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.
- 7. Active Workforce workforce composed of any employee that is <u>not</u> working from home.
- 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.²⁷
- 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.
- 10. 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
- 11. 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.
- 12. 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.
- 13. 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.²⁸
- 14. Bacteria single-celled organisms found throughout nature, which can be beneficial or cause disease.
- 15. 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
- 16. Burden of disease the impact of disease in a population.
- 17. 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

²⁶ A Dictionary of Epidemiology, Fifth Edition, Porta et all, Oxford University Press 2008, Available from: http://www.academia.dk/BiologiskAntropologi/Epidemiologi/PDF/Dictionary of Epidemiology 5th Ed.pdf

²⁷ CDC Vaccines & Immunizations Glossary, Available from : <u>https://www.cdc.gov/vaccines/terms/glossary.html</u>

²⁸ CDC Vaccines & Immunizations Glossary, Available from : <u>https://www.cdc.gov/vaccines/terms/glossary.html</u>

- 18. 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.
- 19. 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.
- 20. 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.²⁹
- 21. *Coronaviridae* family of viruses encompasses a group of pathogens with zoonotic potential.
- 22. 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 CIVID-19.
- 23. COVID-19 the name given by the Worlds Health Organization (WHO) on February 11, 2020, for the disease caused by a Novel Coronavirus SARS-COV-2.
- 24. 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.
- 25. 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.
- 26. Indirect Contact Transmission a mode of transmission of infection involving fomites or vectors. Vectors may be mechanical (e.g., fi lth flies) or biological (when the disease agent undergoes part of its life cycle in the vector species).
- 27. Contagion the transmission of infection by direct contact, droplet spread, or contaminated fomites.
- 28. Contagious transmitted by contact.
- 29. Cumulative death rate the proportion of a group that dies over a specified time interval. It is the incidence proportion of death.
- 30. 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
- 31. Data a collection of items of information.
- 32. Death rate an estimate of the portion of a population that dies during a specified period.

²⁹ CDC Infection Control, Introduction, Methods, Definition of Terms. Available from: <u>https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html</u>

- 33. 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.
- 34. Diagnosis the process of determining health status and the factors responsible for producing it; may be applied to an individual, family, group, or community.
- 35. 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 the 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.
- 36. Disease is the biological dimension of nonhealth, an essentially physiological dysfunction.
- 37. Disinfection the killing of infectious agents outside the body by direct exposure to chemical or physical agents.
- 38. 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.
- 39. Effect the result of a cause.
- 40. 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.
- 41. Epidemic the occurrence in a community or region of cases of an illness, specific healthrelated behavior, or other health-related events clearly in excess of normal expectancy
- 42. Etiology the science of causes, causality; in common usage, cause.
- 43. 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.
- 44. 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
- 45. Factor an event, characteristic, or other definable entity that leads to a change in a health condition or other defined outcome.
- 46. Guidelines a formal statement about a defined task or function.
- 47. 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.
- 48. 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.

- 49. Hygiene The principles and laws governing the preservation of health and their practical application. Practices conducive to good health.
- 50. 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
- 51. 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.
- 52. Natural Immunity- Species-determined inherent resistance to a disease agent, e.g., resistance of humans to the virus of canine distemper.
- 53. 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).
- 54. 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.
- 55. Immunity Protection against a disease.
- 56. 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
- 57. Incidence rate- The rate at which new events occur in a population.
- 58. Incubation period The time interval between invasion by an infectious agent and appearance of the first sign or symptom of the disease in question
- 59. Index a rating scale, e.g., a set of numbers derived from a series of observations of specified variables.
- 60. 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 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.
- 61. Infection The entry and development or multiplication of an infectious agent in the body of man or animals
- 62. 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.
- 63. 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.

- 64. 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.
- 65. 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
- 66. Negative study Often taken to mean a study that fails to find evidence for an effect.
- 67. 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
- 68. Novel Coronavirus A novel coronavirus is a new coronavirus that has not been previously identified.
- 69. 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.
- 70. 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.
- 71. Pandemic An epidemic occurring worldwide or over a very wide area, crossing international boundaries, and usually affecting a large number of people
- 72. Parasite An animal or vegetable organism that lives on or in another and derives its nourishment therefrom.
- 73. Pathogen An organism capable of causing disease.
- 74. Population All the inhabitants of a given country or area considered together; the number of inhabitants of a given country or area
- 75. 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.
- 76. 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
- 77. 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.
- 78. 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 action³⁰.

³⁰ WHO, Strengthening health security by implementing International Health Regulations (2005) <u>https://www.who.int/ihr/procedures/pheic/en/</u>

- 79. 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.
- 80. 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.
- 81. Quantiles Divisions of a distribution into equal, ordered subgroups.
- 82. 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.
- 83. 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.
- 84. Relative risk the number of events in a group divided by the total number of subjects in that group.
- 85. 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).
- 86. 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.
- 87. 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 doseresponse 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, doseresponse 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.
- 88. 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).
- 89. 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

- 90. Severe Acute Respiratory Syndrome (SARS)- a viral respiratory illness caused by a coronavirus called SARS-associated coronavirus (SARS-CoV).
- 91. 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.
- 92. 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.
- 93. 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.
- 94. 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.
- 95. Sustainability The ability to continue economic, social, cultural, and environmental aspects of human society and the nonhuman environment
- 96. 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.
- 97. Transmission of infection- Any mechanism by which an infectious agent is spread from a source or reservoir to another person.
- 98. 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
- 99. 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

³¹ Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Social Distancing Measures , Volume 26, Number 5—May 2020

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.

100. 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
- 8. GDP Gross domestic product.
- 9. HVAC: Heating, Ventilation and Air Conditioning
- 10. JOCIP: 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

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