



Special Course on Building Port Resilience Against Pandemics (BPR)

Participant manual

Section 2: Staff Management, Well-being and Resilience

Strengthening Knowledge
and skills through **innovative approaches**
for sustainable economic development



Development Account
Department of Economic and Social Affairs



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2. STAFF MANAGEMENT, WELL-BEING AND RESILIENCE

The impact of a pandemic also involves psychological (mental) health risks. This is a stressful time for everyone, and measures must be implemented to eliminate and reduce psychological risks to workers and others in the workplace. To determine which measures should be implemented, it is important to conduct a risk assessment and consider all psychological health risks in the port area. It is also advised to include the staff when carrying out this assessment. Staff often know what the problems are and have ideas about how to address them.

In this regard, the objectives of this section are:

- Identify the potential impacts of pandemics on staff well-being
- Adapt work conditions accordingly
- Address any mental and emotional distress-related issues

In order to fulfil the section objectives, the actions have been sorted into two phases. First, the **“Preparation Stage”** covers the actions a port could undertake in the event of a health crisis situation due to a pandemic. A second **“Mitigation Stage”** suggests actions aimed at reducing risks.

2.1 Preparation stage

This section provides recommendations for the management of personnel and for ensuring the best possible environment, as well as identifying the response measures to be taken if a potential health risk is identified.

2.1.1 Education on pandemics

One of the priorities in this respect is to educate people on the pandemic situation, as an essential prevention mechanism for comprehensive action in the face of health emergency response. Ports should create and maintain their educational capabilities, covering topics such as **risk information strategies and plans, procedures, effective information platforms, operational coordination and, most importantly, the ability to reach out to their stakeholders at risk and convince them to take action** to protect themselves when a health risk from an infectious disease occurs.

Ports should organize emergency simulation exercises in response to potential health risks from contagion. This will allow the review, analysis and updating of existing emergency planning, organizational structures and early warning systems, and will help to familiarize key personnel with emergency procedures and their responsibilities in implementing them. Just as ports take action in different risk situations (fire, explosion, spills, accidents, etc.), the risk to health from contagion must also be addressed.

These exercises can be developed in various ways:

- Conferences, roundtables or general discussions – which may include visual presentations. All personnel who have a role in the emergency plan or procedure should participate. The exercise may also include a review of previous cases, if any, to assess results and possible gaps in information. This

will give an idea of the performance of the port during an emergency situation and thus enable the port to anticipate gaps and areas for improvement.

- Tabletop exercise – to enable key emergency response personnel to gather to discuss a simulated or hypothetical emergency situation. Designed as an exercise to filter the relevant information and make key decisions, participants are tasked with reviewing and discussing risk communication and related actions they would take at specific stages of the emergency. This allows emergency risk communication plans to be tested in an informal, low-stress environment.
- Tabletop exercises are often used to clarify roles and responsibilities and to identify additional threat mitigation and preparedness measures.
- The exercise should result in action plans to continuously improve the emergency plan. The scenario and script should provide very detailed information to recreate the events and facilitate understanding and monitoring of the actions.
- Simulation exercise / Drills – A drill is a fully simulated interactive exercise that tests the ability of an organization or other entity to respond to a simulated emergency, disaster or crisis situation. Simulation exercises are normally conducted as field exercises and include a scenario as close to reality as possible. The scenario takes place in real time and requires various resources to operate, both human and material.
- These are exercises of practical operations in which the actions of the participants are evaluated. The actions taken and the way in which decisions are taken in response to the particular situation will determine the course of the exercise. Safety plans may be necessary in the event of exposure to real physical risks and psychological support must be available to deal with any emotionally stressful situations that may arise.
- The simulation exercise can be sector-specific or involve cross-sectoral coordination. With regard to risk communication, simulation exercises have to integrate risk communication actions into other public health emergency responses such as **epidemiological, information management, patient care, disease prevention and control, response coordination, among others.**

2.1.2 Raising awareness on pandemics

As discussed in section 1.6 above, workers' awareness is another basic aspect of staff management in pandemic situations.

In the event of a health crisis, the WHO and the health authorities are responsible for sending out messages to staff regarding the risk of contagion. The messages should inform recipients about how contagion occurs and how to behave individually and collectively in order to prevent and reduce the risk of transmission. In this context, it is essential that ports and related companies keep their staff informed through training and awareness initiatives. This will allow workers to protect themselves and their colleagues.

It should be noted that the risk of cross-border transmission of infectious disease pathogens is high when people travel and goods are traded. Therefore, passengers, goods or other vectors infected in one place could transmit diseases to other passengers or crew during their journey or infect people at destination. At the local level, entry

points such as ports with large numbers of infected or exposed passengers are difficult to manage and have a significant economic impact.

There are various ways of communicating information with the aim of raising awareness about the behaviours and measures to be adopted in the work environment. These include communication channels with greater scope for outreach and ways of providing more specific information. Below are the most widely-used communication channels:

- **Teleconferences and ‘webinars’.** Teleconferencing has proved to be a useful means of creating learning and coordination spaces. Applications such as Google Hangouts, Skype, Zoom, GoToMeeting, Webex or other virtual meeting multimedia allow companies to hold conferences and training sessions.
- **Podcasts** promote self-paced, in-depth learning. These pre-recorded audio files have long been used in entertainment and news. However, their emergence as a vital teaching tool provides a promising alternative to more traditional methods.
- **Social networks.** Social media could also serve as an easily accessible and quick educational resource. Twitter plays a key role in continued education via “tweetorials” (clinical tutorials in a series of tweets that provide links to educational material). The use of hashtags (e.g. #COVID19training, #MedEd) enhances the dissemination of information and the sense of community. Facebook has also functioned as an alternative platform for discussions among workers.
- **Educational material:** Another type of communication channel with high impact on workers is the placement of **posters, leaflets, booklets**, etc. with both prevention and awareness messages. Posters on billboards can be put up in the entrance/departure areas of ports to remind users and staff to be vigilant by adopting good practices and adhering to basic recommendations.

Figure 5: Educational material¹



2.1.3 Work from home protocols

With recent technological advances allowing mobile connections at increasingly affordable prices, working outside the office has become an option for many workers around the world. Since the term “teleworking” was first introduced in the 1970s,

¹ Educational Material <https://www.google.es/search?q=folletos+covid>

academics and practitioners have discussed the benefits of working outside the office, as it represents a fundamental change in the way organizations have historically done business. The evolution and growth of teleworking is also linked to technological advances and changes in the economy. Distance working opportunities have increased along with home computing capabilities. Since the introduction of personal computers in the 1980s and laptops and mobile phones in the 1990s, the prices and sizes of these devices have decreased while the speed and bandwidth have increased. The COVID-19 pandemic has had a huge impact on working practices and on the potential for teleworking—provided that it is well managed by the company.

Although the term teleworking has been used for decades, researchers have employed a variety of terms and concepts when reporting the results of studies on this issue. Teleworking has also been referred to as distance working, remote working, telecommuting, distributed work, virtual work, flexible work, flexible workplace, among other names. Therefore, there have been many different definitions, including the following:

Teleworking: This is a form of organizing and carrying out work which, through the use of information and communication technologies, allows work which is normally done at the company's facilities to be done elsewhere.

Thus, **teleworking** or remote working may be:

- Carried out at home.
- Carried out in telecentres (facilities equipped with technologies that can be used by several teleworkers).
- Mobile or itinerant work (carried out by workers who move frequently from one place to another and take their virtual office with them).

A **working day** can be full-time or part-time (a few days a week or part of a day, for example), depending on:

- The type of activities in the workplace
- The necessary computer equipment
- Data access mode
- Technological level of the company

Recommendations to implement teleworking in a pandemic situation

The implementation of teleworking practices in a company can be a challenge. With the global spread of teleworking, there are many opportunities for both the company and the employees. However, proper management is essential: having different teams in different locations and often with different schedules can be a problem when managing the company and, in practice, these aspects might undermine the implementation of remote working.

To this end, in order to identify and share best practices for teleworking, it is first necessary to establish the nature of the work, the worker's degree of autonomy and the organization of schedules.

a) Nature of work when teleworking

While there are a number of attitudinal and productivity benefits associated with teleworking, clearly not all jobs or tasks are suitable for this type of work arrangement. A distinction should be made between essential work that has to be done in place (security, maintenance of facilities, etc.) and that which can be done remotely to some extent (administrative and financial management, marketing, customer assistance, etc.).

In the port community, the activities that can be adequately done remotely generally do not involve essential services and refers to job positions that can still perform all of their functions and tasks at a distance. The table below shows examples of tasks that have to be carried out in-situ and those that could be carried out remotely.

Table 2: Comparison of in-situ and teleworking positions in a port

In-situ job positions	Positions suitable for teleworking
Technical-nautical services. Pilotage, towing and mooring.	Administrative activities
Port service. Handling of goods	Financial Services
Port services of waste reception, cargo residue reception, and fuel supply	Customer service
Commercial services such as ship consignment, freight forwarders, customs agents and other services such as ship supplies	Certain software developments, applications, etc.
Port Authority personnel needed to maintain services: Port Police, Protection Officers, Security Officers (Dangerous Goods), Maritime Traffic Control Centre Controllers, ICT Maintenance, Port Authority management personnel, maintenance service, third-party services that enable general services. (cleaning services, maintenance etc.)	Certain marketing activities and communicating information to stakeholders.

b) Employee autonomy

Autonomy reflects the extent to which the job allows freedom, independence and discretion in making decisions and choosing the method by which work-related tasks are to be completed.

c) Timetable control

Another barrier to implementing teleworking is the doubts a company may have about controlling workers' schedules. In this respect, staff might be required to connect to the company's computer terminals during a fixed schedule, so their work can be continuously monitored. While supervision is important, the extent to which teleworking is associated with beneficial outcomes may depend on the level of flexibility in working hours.

Conditions for proper implementation of teleworking

As mentioned above, during a pandemic, one priority is to minimize interaction among workers to reduce the risk of infection. Therefore, one of the main measures to this end is to promote teleworking for the staff that can carry out their work activity remotely. However, a series of conditions must be taken into account. These are determined by national rules and regulations to ensure the continuity of essential activities. For example, these regulations might determine:

- General conditions regarding working hours, timetable and location.
- Working procedures and methods, especially regarding the form and manner of reporting results.
- Minimum conditions that the workspace must meet and the way in which the company will evaluate the work-related risks.

- Equipment and accessories that the company will provide to the worker (computers, mobile phones, etc.).
- Assumption of costs derived from the provision of services (office furniture, light, heating, Internet, etc.).
- Carrying out specific training for a specific job position.
- Voluntary work by the worker, conditions for suspending teleworking in the event of failure to comply with the agreed obligations.

Once the implementation of teleworking has been assessed, it is important to define some of the procedural aspects.

a) Define quantifiable objectives

It is very important to clearly define each team's objectives to be achieved during the period of teleworking. Ideally, these objectives must be quantifiable, i.e. they must be observable and measurable, in order to be able to assess workers' productivity.

b) Provide staff with the necessary training on teleworking tools and equipment

It is the responsibility of the company to train and educate the staff who will be working remotely. Remote workers must be prepared to carry out all their tasks at all levels, and be familiar with the tools they will be using for their daily work.

c) Provide staff with the necessary equipment

As mentioned above, the company should provide the necessary work equipment for remote employees, including both hardware and software (computers, mobiles, tablets, licences, etc.).

d) Maintain good communication with employees that are teleworking

When working remotely, it is necessary to establish good communication between teleworkers and the office. To this end, the communication channels must be defined (e.g. which video call programme will be used), as well as the number and duration of meetings or calls per day or week.

e) Implementing tools to manage and control the productivity of the work team

To be able to monitor the obligations of the teleworker and staff productivity, it will be necessary to implement management and control tools, and these will have to be specified beforehand.

Currently, there are different tools that allow not only the possibility of working in teams of teleworkers, but also enable the monitoring of tasks and productivity. Examples of some of the most commonly-used tools are:

- Trello: is designed for organizing and planning projects through the creation of dashboards, where users can upload files, leave comments and have conversations with other team members.
- Microsoft Teams: is a communication and collaboration platform that combines work chat, video calls, cloud storage, as well as a subscription to the Office 365 suite.
- Toggl: is a time-tracking tool suitable for measuring productivity. It allows the addition of multiple projects, the association of projects with specific customers and the use of labels. It also has a planner that measures the time spent on collaboration and allows the design of graphics and reports.

Best practices for working from home with the rest of the port community

In the event of a pandemic, as shown in this manual, one of the key responses is social distancing, since the infectious vectors are people. For this reason, reducing mobility and agglomerations in the workplace is one of the priorities when implementing “**teleworking**”. Bear in mind that in a port it is critical to maintain the continuity of the supply chain and to be in contact with the whole port community. In this context, it is a priority to reduce the number of personnel in the port facilities by implementing **teleworking** for those positions that can be carried out remotely. Generally, the companies of the port community usually assign administrative and financial workers to carry out their activities from home.

However, the different companies in the port community might have different paces of implementation, as well as limitations with regards to the available information and telecommunications technology infrastructure. Therefore, the implementation of teleworking varies according to the port and port companies. During the COVID-19 pandemic, some ports immediately implemented teleworking for all administrative positions, while other ports have gradually transitioned, step by step. One of the key aspects is the ability to manage teams and workers optimally and efficiently despite the distance. In this context, agile management methods can be applied (e.g. **Scrum methodology, Kanban**, etc.), which can help the port to manage teams working remotely by providing both a global overview of the work and a more particular focus on the tasks being completed. Presented below are some actions that help smooth the transition to teleworking:

- **Define the objectives and estimated deadlines**, making each task clearer and more efficient. The definition of objectives and deadlines is very important during teleworking, as it allows the team to be organized around each task and to define the timescales.
- **Daily meeting**: Hold a short, focused daily meeting with workers and/or teams, lasting no more than 15 minutes. This helps the team to meet even when teleworking, to set goals and to know the progress of the project. Some specific questions will help make the most of this opportunity, such as: What was done yesterday? What is going to be done today? Are there any obstacles to progress?

To make this task effective and comfortable for everyone, the idea is to set specific schedules so that every team member has the opportunity to participate. To do this, it is useful to set up video conferences to ensure face-to-face contact, creating an atmosphere of collaboration and trust.

- **Evaluate the work carried out**. If there have been problems, identify the mistakes and set out proposals for improvements. By creating these feedback loops, the team continues to feel the confidence that is required to carry out changes in a flexible, efficient, and clear manner.

In sum, the implementation of good practices with the help of technology and digitalization will allow individual workers and the entire team to understand the objectives, the tasks to be performed and the deadlines for completing them. This way, workers can clearly see the way forward, while the company will continue to have teams united and aligned around common objectives, even when working remotely.

2.1.4 Preparing port facilities for on-site work during pandemics

In the previous section, the implementation of teleworking to reduce the number of people in the workplace has been discussed. Although it is mainly administrative and financial jobs that can be carried out remotely, there are other functions (such as those described in Figure 7 below) which must be carried out in situ to ensure the continuity of basic port activities (maritime access, berthing, and loading operations, etc.). Within this framework and as discussed previously in Section 1, a series of recommendations could be established for preparing the working area in a way that allows the distance between workers to be maintained:

1. Reorganize terminal facilities and equipment

The need to maintain social distancing between workers along with increased turnover times means the activities in the terminals should be reorganized to allow the sanitizing of vehicles and equipment used by workers before each shift or change of working group.

2. Establish closed working groups

In order to contain the spread of the virus in the workplace and limit its effects on essential services, closed working groups should be established as far as possible. Closed groups means that each group is always made up of the same workers and does not come into contact with members of other groups. In each port, this measure may be adapted to its work systems, and these groups may refer to shifts or types of traffic, for example.

The organization of the operational teams varies according to the size of the port and the type of cargo handled. For this reason, most ports implement changes in operations with a rotation system involving the formation of teams 1 and 2, which do not meet physically. These teams usually alternate weekly. In larger organizations, there are examples where the number of people working in teams 1 and 2 has been reduced to create a standby team 3. There is an even more advanced example of ports operating with teams 1 and 2, while team 3 is composed of a set of multidisciplinary professionals who can move around the different operational areas. To ensure cargo operations, facilitate the creation of operational standby teams and/or minimize the risks of contagion, some ports have stopped providing non-essential services in order to prioritize and ensure the continuity of their core port activities (maritime access, berthing, and cargo operations).

3. Establish and manage work areas (outdoor and indoor areas)

The outdoor and indoor work areas in a port are classified with specific recommendations for each type.

i. Outdoor areas (dock, yard, parking, access areas, etc.)

- ✓ Establish staggered arrival and departure times at work to reduce overcrowding in the workplace.
- ✓ Limit access points and establish areas outside the building or port areas to check the temperature of employees on a daily basis.
- ✓ Provide additional parking areas or facilities. Parking should be differentiated into areas to avoid interaction between work teams entering and leaving. An arrow or colour sign system could be implemented to be followed by the different teams in each shift change.

- ✓ Use markings and a one-way flow system at entry and exit points (separate areas for each direction).
- ✓ Limit passengers in transport vehicles (e.g. work minibus)
- ✓ Use outdoor areas as common areas (when necessary) whenever possible.
- ✓ Increase the level of sanitation of the facilities, especially in the common areas.

ii. Indoor areas (offices, dining rooms, rest areas, stairs, changing rooms, etc)

- ✓ Establish staggered rest times to reduce overflow in resting areas or dining rooms.
- ✓ Use a protection system for staff in reception, dining rooms or similar areas.
- ✓ Reconfigure seats and tables to maintain space and reduce face-to-face interactions through the use of plexiglass screens.
- ✓ Limit or restrict the use of common items and equipment (e.g. printers, whiteboards, vending machines in the areas, etc.). Avoid sharing telecommunication devices, fixed objects, etc.
- ✓ Regulate the use of changing rooms, and other areas of the facilities to reduce simultaneous use. If it is not possible to guarantee disinfection after each use, separate areas should be designed to allow social distance between workers.
- ✓ Ensure sufficient space in common areas (e.g. receptions, stairs) and mark the distances to be respected as well as the number of people allowed at a time in each of them.
- ✓ In areas where regular meetings are held, use floor signs to help people maintain social distance. Whenever possible and when necessary, hold meetings in open spaces or outdoors.
- ✓ Provide alternatives to touch-based security devices such as key panels for room access and lifts, etc.

4. Establish a separate “one-way flow” system

- ✓ Use markers to indicate a one-way flow at entry and exit points.
- ✓ Use signs such as floor markings to indicate 2-metre distancing between people and to allow controlled flow around the area.

Figure 6: Example of marking for one-way zones²

5. Identify critical spaces

- ✓ Identify areas where people need to pass things directly to each other (such as work information, spare parts, samples, raw materials) and find ways to eliminate direct contact (e.g. using delivery points or transfer areas).
- ✓ It is recommended that risk assessments are carried out in critical areas, with the employees normally involved in the task in question, to increase the likelihood that the agreed solution will be adopted by users.
- ✓ Minimize the congestion of employees at bottlenecks such as time clocks, reception areas, entrances and exits by setting staggered arrival times and maintaining strict social distancing during shift deliveries through the use of floor markings and signs.
- ✓ Provide alternatives to touch-based security devices such as key panels for room access and lifts.

6. Determine the equipment that must be duplicated (security controls, locker rooms, etc.)

- ✓ Assess the equipment and material that will need to be duplicated to avoid being exchanged between workers if cleaning or disinfection cannot be guaranteed after each use. Staff should have their own equipment (e.g., laptops, keyboards, lockers, etc.) and it should not be exchanged with or used by other workers.

² Marking for one-way zones www.areagraficadigital.es/productos/proteccion-y-señalización-coronavirus/senalizacion-coronavirus/58/191/flechas-adhesivas-suelo.html

- ✓ If equipment or materials are to be shared, markers should be used to indicate whether they have been disinfected. These may be coloured markings (e.g., green) on areas such as tables, computers, chairs, telephones, etc.

7. Ship anchorage zones

- ✓ Increase flexibility in port operations. This can be achieved by extending the bunkering area to a ship's anchorage zone to minimize the need for berthing, for example.

2.1.5 Stock of protective equipment inside the port area

Still in the preparation stage, it is important to define the necessary minimum stock to have on hand (e.g., hydroalcoholic gel, masks, gloves and glasses, etc.). Based on international practices, in the event of a pandemic, it is important to act quickly and prevent the spread of the disease by focusing on the health and safety of the port community while keeping the port operational. As noted above, priority should be given to the port activities that ensure the supply of essential goods needed by the community and society as a whole. In this situation, a port should have a stock of personal protective equipment (PPE) to protect against contagious diseases.

- The equipment in stock must cover a month's supply for on-site workers.
 - Keep an inventory and regularly check cleaning and disinfection equipment.
 - Organize disposable protective equipment based on sectors or essential work positions.
 - Monitor the necessary quantity of stock and its duration in a sanitary emergency situation. A minimum one-month supply is recommended to avoid possible equipment shortages.
- The reserve must be efficient, meaning that the use of the material must be linked to the useful life of the products (expiry dates) with expired items replenished to ensure the reserve is full.
- The storage and logistics of the national strategic reserve will be handled by the General State Administration and the distribution criteria, if necessary, will be based on criteria of need and equity.
- Close relationships or contracts should be maintained with PPE suppliers to ensure the availability of this material in the event of a health crisis.

Figure 7: Example of personal protection equipment for COVID-19³

2.2 Mitigation stage (during a pandemic)

As previously discussed, it is important to bear in mind the measures that need to become standard behaviour in situations of health risks due to infectious diseases:

- **Wash hands** frequently following the guidelines for correct hand hygiene and for the amount of time established as necessary. For example, if you have a meeting wash your hands with soap before and after the meeting. Remember that handwashing is the most simple and effective way to fight the coronavirus.
- **Wear a mask** in public places to protect oneself and the others. The mask has become a mandatory part of our daily outfits. Use disposable masks or disinfect them at the end of the day.
- **Ban handshakes and respect social distancing of 1 to 2 metres.** Keep a safe distance and avoid physical contact.
- **Do not share office items** such as pens or computer keyboards in case they cannot be disinfected between users.
- **Leave a reasonable distance** between seats in meetings and presentational events
- **Apply respiratory hygiene measures.** Cover your mouth and nose with a tissue when sneezing and coughing, then throw the tissue away. If not possible, cover your mouth and nose with your elbow. Wash your hands right after.
- **Specific rules for specific sectors and places.** Adapt the regulatory standards of the sector and specific rules of the country with which you collaborate, in addition to those of the organization.

Apart from these standard actions, there are other measures to minimize the risk of contagion in the workplace during a pandemic situation.

³ Protection equipment use for workers (during COVID-19) www.freepik.es/fotos-vectores-gratis/coronavirus

2.2.1 Control measures

One of the aspects that is key to the proper management of pandemics in a port is the application of control measures in work areas to reduce risks of contagion. During an outbreak of an infectious disease, when it is not possible to eliminate the hazard, the most effective protective measures are:

a) Collective protective measures

Collective protective measures involve isolating employees from work-related hazards. In workplaces where they are deemed appropriate, these types of controls reduce exposure to hazards without relying solely on worker behaviour and may be the most cost-effective solution to implement. Some possible measures include:

- Install high-efficiency air filters.
- Create one-way walkways.
- Avoid bottlenecks in passing areas
- Increase ventilation in the working environment.
- Install physical barriers, such as transparent plastic, partitions, no-go areas, etc.
- Install forced ventilation (negative pressure) in some spaces.
- Identify isolation rooms for the infected.

b) Administrative measures

Administrative control measures require the involvement of the employee. Typically, administrative controls are changes in work policy and procedures to reduce or minimize exposure to a hazard. Examples of administrative controls for pandemics include:

- Encourage workers with possible symptoms to stay home.
- Minimize contact between workers, clients and customers by replacing face-to-face meetings with virtual meetings, online communications and adoption of teleworking, if possible.
- Establish alternate days or extra shifts that reduce the total number of employees overlapping in a facility at any given time, allowing them to maintain distance from each other while attending a full work week on site.
- Avoid non-essential travel to sites with risk of infection. Regularly review national travel warning levels and restrictions.⁴
- Develop emergency communication plans, including a forum to respond to worker concerns and web-based communications.
- Provide workers with up-to-date training and knowledge on pandemic risk factors and protective behaviour, cough etiquette and care of PPE.
- Train employees who use protective clothing on how to properly wear it, use it, etc. Training material should be easy to understand and available in the appropriate language.

c) Safe working practices

As seen in section 1, **safe working practices are types of administrative controls that** include procedures for safe and appropriate work used to reduce the duration, frequency or intensity of exposure to a hazard.

4

Example: www.cdc.gov/coronavirus/2019-ncov/travelers

Examples of safe working practices in the event of a pandemic include:

- Use of PPE.
 - Examples of PPE are: gloves, goggles, face shields, face masks and breathing protection, where appropriate. During an outbreak of an infectious disease, such as COVID-19, recommendations for PPE that are specific to work occupations or tasks may change depending on the geographic location. Provide updated risk assessments for workers, and information on PPE effectiveness in preventing the spread of the disease.
- Provide resources and a working environment that promotes personal hygiene.
 - For example, providing tissues, no-touch rubbish bins, hand soap, alcohol-based hand wipes containing at least 60 percent alcohol, disinfectants, and disposable towels for workers to clean their work surfaces.
- Require regular hand washing or the use of alcohol-based hand rubs. Workers should always wash their hands when visibly dirty and after removing any PPE.
- Putting up hand washing signs and hygiene instructions in bathrooms.
- Frequent cleaning and disinfection of work areas, meeting rooms, restrooms, etc.
- Fumigation of storage and handling areas for goods, containers, etc.

2.2.2 Testing process and strategy

This section provides information on how to design testing strategies for workers operating in the port. During a pandemic, there are cost and time limitations that require effective strategies focused on identifying and reducing contagion. Tests allow the port to monitor the progress of the contagion, and therefore to adopt informed measures to reduce and prevent the spread of the disease. Examples of strategies adopted during the COVID-19 pandemic can help ports to define a course of action in the event of infected workers being detected, with or without symptoms, thereby enabling the disease to be controlled.

The following actions enable the correct implementation of a testing and tracing strategy:

- Prioritize on-site tests on essential personnel.
- Authorize priority supply of disinfection material and individual protective equipment to essential services
- Empower managers of port community companies (e.g. directors and supervisors) to administer health questionnaires and temperature controls using appropriate PPE, following the guidelines of the Health Authorities.

An example of a testing strategy is the one proposed by the US Center for Disease Control and Prevention. The strategy is based on identifying a confirmed case of COVID-19, then interviewing and testing potentially exposed co-workers as soon as possible to reduce the risk of further transmission in the workplace.

A comprehensive approach is recommended to reduce transmission. Positive test results indicate the need for the individual in question to be excluded from work and to isolate at home. A risk-based approach can be used to examine the co-workers of a person with a confirmed infection. Such an approach should take into account the likelihood of exposure, which is affected by the characteristics of the workplace and the results of tracer investigations.

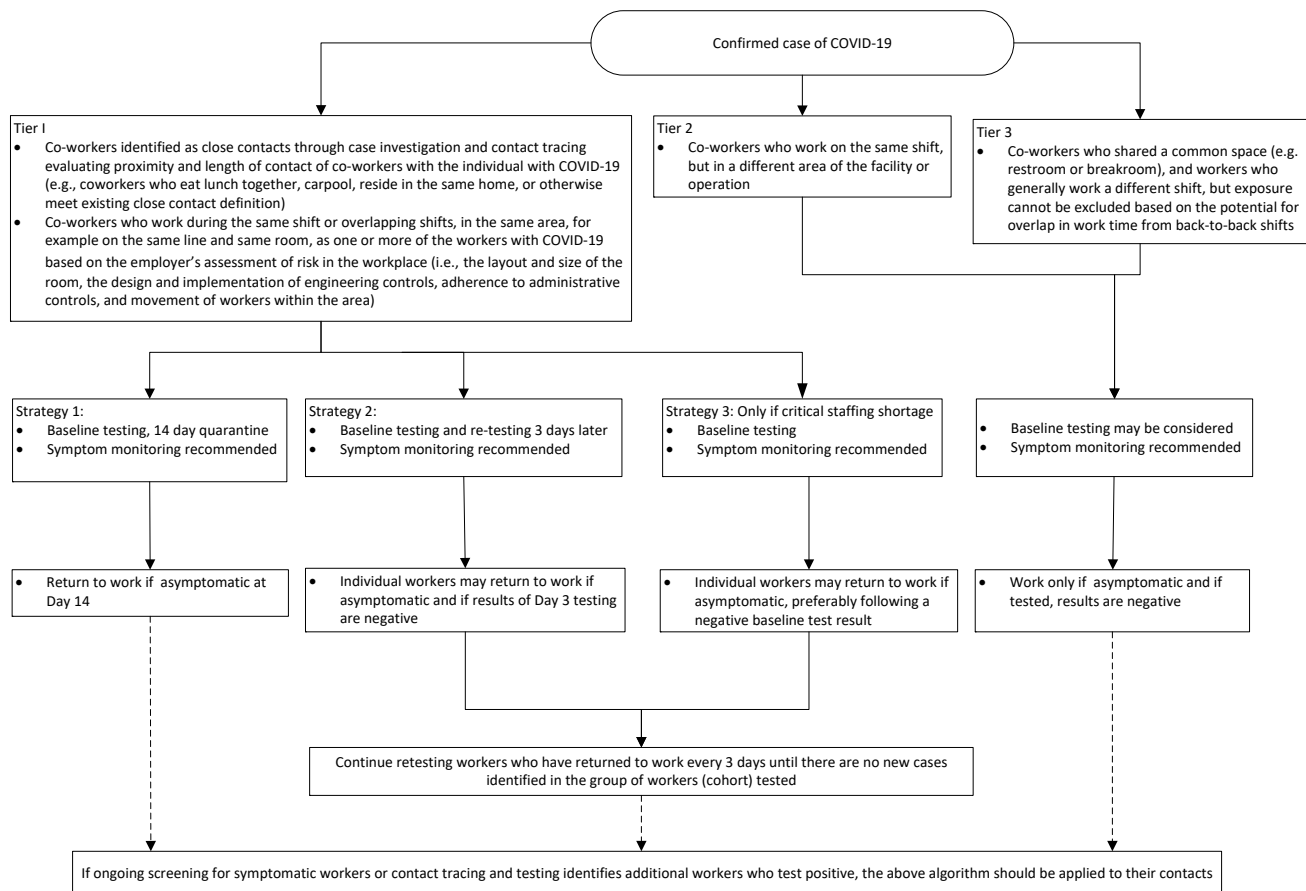
The outbreak of Covid-19 has prompted ports to require or recommend that port workers get vaccinated. Vaccination aims, among other objectives, to reduce the mortality associated with the disease, and to limit the spread of new cases in the population. The WHO states that “it is not vaccines that will stop the pandemic, but vaccination”. In a pandemic situation, this is generally a necessary condition for international travel in addition to other complementary measures such as specific detection tests (antigen or PCR). Therefore, health committees must consider incorporating these measures and precautions in the port practice, taking into account the status of critical nodes in the supply chain.

Figure 8: Example of a COVID-19 Strategy⁵

Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case is Identified

The testing strategy outlined above is an optional one designed to augment existing guidance and measures to reduce transmission in the workplace

Testing and contact tracing should only be implemented if results will lead to specific actions. When symptom screening and subsequent testing identify a confirmed case of COVID-19, interviewing and testing potentially exposed co-workers should occur as soon as possible. Based on the likelihood of exposure, characteristics of the workplace, and results of contact investigations, a progressive tiered approach to testing these co-workers may be applied. In selecting a strategy, employers should consider which strategy appropriately balances maintaining operations with worker safety.



By reviewing work logs from the facilities and port operations, identifying movement patterns of workers (to design one-way flow systems) and interviewing employees, co-workers can be classified into the three priority levels of testing. Setting priorities should be done quickly so that there is no delay in testing co-workers.

- ✓ **Level 1 is the highest priority** for the testing of exposed co-workers. Due to the fact that infected individuals may have been infected before the onset of symptoms, contact tracing and baseline testing should include all co-workers who interacted with the infected worker at least 2 days before the observation of symptoms (or, for asymptomatic workers, 2 days before sample collection).

⁵ U.S. Department of Health & Human Services (Center for Disease Control and Prevention www.cdc.gov/coronavirus/2019-ncov/community/worker-safety-support/hd-testing.html)

- ✓ **Level 2 is the next highest priority level** for testing. Level 2 includes workers on the same shift, but in a different area of the facility or operation who may have been exposed to a confirmed infected worker. Testing may be extended to Level 2 workers based on the results of contact tracing or based on the employer's risk assessment at the workplace. If additional infection cases are identified, re-evaluation of the level and testing will be indicated.

Some facilities and workplaces may apply Level 1 and Level 2 testing simultaneously. This would include testing all exposed workers in the same shift as the worker(s) with confirmed infection, regardless of the area of the facility.

- ✓ **Level 3 includes workers who are not in Level 1 or 2.** Level 3 includes workers who shared a common space (e.g., a resting area, a lounge) and therefore exposure to workers with confirmed infection cannot be definitively ruled out. Level 3 also includes workers who generally work in a different shift from the infected worker(s), but exposure cannot be excluded due to the possibility of overlapping working time of consecutive shifts. Testing may be extended to Level 3 workers based on contact tracing or on the worker's concern about the overall risk of the disease in the workplace. Some facilities and workplaces may choose to include testing of Level 3 co-workers from the initial identification of contagion.

The implementation of testing strategies can complement measures to reduce transmission at the workplace, provided that other protections are in place to protect workers' health while keeping the workplace open.

Level 1 workers who have had close contact or exposure to an infected co-worker should be examined and quarantined as soon as possible to reduce the risk of further transmission at the workplace. Workers should follow existing guidelines for self-monitoring by checking their temperature twice a day and monitoring their symptoms. Different strategies with different levels of transmission risk in the workplace can be considered to bring exposed but asymptomatic Level 1 critical infrastructure workers back to work with appropriate workplace protections. Strategies that involve a series of tests (e.g., baseline test and second test after 72 hours) are more likely to identify infected workers than one-time testing. When selecting a strategy, managers should consider which one is most appropriate to continue operations while ensuring the safety of workers.

- **Strategy 1:** Ensure that exposed workers at Level 1 follow the existing recommendations regarding exclusion from work. These workers are excluded from work and quarantined, depending on the incubation period, even if their reference test results are negative. This strategy reliably isolates workers who have been exposed and may be infected, limiting the infection of others in the workplace.
- **Strategy 2:** This strategy is an evidence-based option to return to work within 14 days of exposure for Level 1 workers. This includes baseline and series testing (that is, repeated testing) every 3 days until no more new cases are detected. Level 1 workers who remain asymptomatic and test negative at baseline and may return to work on day 3 should continue to be tested every 3 days after returning to work until no more new cases are detected in their work environment.
- **Strategy 3:** During critical personnel shortages, another strategy to help facilitate an early return to work is to allow asymptomatic Level 1 workers to return after obtaining a baseline test. Under this strategy, it is recommended that the return to work occurs after a negative test result, but it could occur while the results are pending, provided other protections are in place. In this case, the

work environment should continue to be tested every 3 days after returning to work until there are no more new cases. Workers who test positive or become symptomatic should be excluded from the workplace, as indicated above. This strategy should only be considered during critical employee shortages.

However, national and local regulations may vary. For example, the testing strategy may require the involvement of the public health department, the employees' health clinic, a health care provider, or the use of local health care facilities.

Symptom detection, testing and contact tracing should be conducted in such a way that confidentiality and privacy are protected, in accordance with applicable laws and regulations. To prevent stigma and discrimination in the workplace, testing of workers' health should be as private as possible. The examination of symptoms on entry into the workplace should be designed in such way that the examination process is conducted as privately as possible, without any worker's personal information being overheard or inappropriately communicated.

Figure 9: COVID-19 testing facilities in Abu Dhabi Ports⁶



2.2.3 Crew change management at port level

In situations of health crisis caused by a pandemic, governments might implement travel restrictions that create major obstacles to crew rotation and the repatriation of seafarers. In this regard, some international and regional organizations, such as the IMO, the European Sea Ports Association (ESPO) and the Federation of European Private Port Companies and Terminals (FEPORT), are calling for Member States to designate seafarers as key workers so that they can travel between their workplace ships and their countries of residence.

It should not be forgotten that “the possibility for crews to board a ship, return home or be relocated after a long period at sea is a priority” and “it is essential for the functioning of European logistics chains that countries facilitate crew changes in all their seaports”. Within this framework, ports must minimize disruption to trade and their supply chain by giving priority to maintaining open and efficiently-functioning logistics networks. Ports must therefore facilitate the management of crew turnovers by ensuring the

⁶ Abu Dhabi Ports have set up COVID-19 testing facilities at ports of Zayed and Khalifa with the capacity to test up to 700 people daily <https://www.adports.ae>

health and safety of both the crew and the port workers involved in the execution of these operations.

To this end, it is recommended to establish a protocol to guarantee safety of seafarers and avoid any risk of contagion in the port area. This requires adequate management of interactions between crews and port personnel to control the risk of the crew getting infected, or infecting others, while they move around the port when embarking or disembarking the ship.

Examples of good practices regarding crew management, embarking and/or disembarking operations are described below.

Table 3: Example of procedure for crew embarking/disembarking

Procedure in Port / Port area	Management of crew turnover on a ship: embarking or disembarking.
1.	In the case of embarking, the ship must remain in port before the crew arrives to minimize time spent in the port area, chances of contact with other personnel and maintaining the minimum distance recommended by the WHO or country regulations.
2.	The consignee must provide vessel details of signatories and non-signatories as part of its notification with an “arrival” crew list and a “departure” crew list.
3.	Access to the ship must be arranged by its agent or representative (consignee), and it must be ensured that any testing requirements of the port health authority, or other authorities, that may be required for transit through the port are met.
4.	Crew must comply with standard precautions for protection and control of hygiene-related infections (e.g. washing hands, using a hand disinfectant, avoiding touching the face, maintaining social distance, etc.). They must avoid contact with people who appear to be ill or who show any symptoms (e.g. cough, fever, etc.) . They must avoid close contact and non-essential interaction with other personnel in the port, including other crew
5.	Crew must wear the PPE indicated in the port area (e.g. masks, gloves, etc.), and carry and handle their own baggage.
6.	Crew should keep all relevant documents necessary for the journey to the ship in a bag or compartment that is easily accessible and can be disinfected later. They should inform the Company (representative or local agent) if they show any symptoms of illness.
7.	Both the port and the ship shall provide for the disposal of any PPE used during the voyage (only that which cannot be washed/disinfected), and any other items not required on board the ship.

Figure 10: Example of Crew Management guidelines by the IMO⁷**D****Port – Crew Change Information Sheet**

The protocols refer to a document that could be prepared by ports to provide essential information to all concerned about special measures related to coronavirus (COVID-19), which would be relevant to facilitating safe crew changes in the port.

The following are some of the types of information that ports should consider providing in a form that is available to other stakeholders concerned with facilitating safe crew travel and transfers.

PORT – CREW CHANGE INFORMATION SHEET

Date:

Port Name:

Location:

Country:

General information on port operation during the coronavirus (COVID-19) pandemic:

General measures related to the coronavirus (COVID-19) pandemic:

Method(s) of providing health advice/alerts issued to port users:

Description of any health measures and screening procedures for seafarers arriving at the port to join a ship:

(e.g. temperature checks, health self-declaration forms/questionnaires, testing, etc.)

Description of health measures and screening procedures for seafarers disembarking ships in the port:

(e.g. temperature checks, health self-declaration forms/questionnaires, testing, etc.)

Description of special measures and procedures for conducting crew changes in the port:

(e.g. security, customs & immigration, health, etc.)

Designated zones or areas related to facilitating seafarer movements in port and conducting crew changes:

(Drop-off & pick-up zones, holding/segregation areas, healthcare facilities and assessment areas, etc.)

Description of any special local movement or travel requirements/restrictions:

Port Health Authority

Name:

Contact information:

Designated medical/healthcare facilities

References or links to relevant local/national requirements or guidance

Among the recommendations, the following actions can be highlighted:

- Provide the shipping companies (their representatives or agents) with all the necessary requirements or measures established by the port in relation to the fight against a pandemic, as well as the requirements for crew changes.
- Designate a special area or zone for crew members arriving at the port to eliminate or reduce close contact and non-essential interaction with other people or infrastructure in the port.
- Arrange in advance for the transport of crew members from the special or arrival area to the ship to eliminate or reduce close contact and non-essential interaction with other persons or infrastructure in the port.

Figure 11: Crew management form⁸

CREW CHANGE ADVICE FORM

Vessel Information: Vessel Name: _____ Flag: _____ Port: _____ Date: _____ Location: _____

Crew Details: Name: _____ Address: _____ Email: _____ Tel: _____

Health Questions: Is the seafarer a Maritime Security Identification Card (MSIC) holder? YES ☐ NO ☐ Holder of other Seafarer identity document? YES ☐ NO ☐ Type: _____ Does the seafarer hold the following documents? Letter from Employer? YES ☐ NO ☐ Letter from Port Authority? YES ☐ NO ☐ Copy of COVID-19 management plan/standard procedures? YES ☐ NO ☐ Crew Health Self-Declaration & Daily Temperature Records? YES ☐ NO ☐ Has the seafarer been provided appropriate PPE for the travel? YES ☐ NO ☐ Has a company Pre-departure medical/health check been conducted for COVID-19? YES ☐ NO ☐ Location of test: _____ Name of Test: _____ Date of Test: _____ Are the test results available? YES ☐ NO ☐ PENDING ☐ Has the seafarer tested positive for the antibodies for COVID-19? YES ☐ NO ☐ Does the seafarer have any COVID-19 symptoms or is unwell? YES ☐ NO ☐ Has the seafarer been in contact with anyone testing positive to COVID-19? YES ☐ NO ☐ If YES add details date/location: _____ Has twice daily temperature testing been conducted for the last 14 days and temperature been normal? YES ☐ NO ☐ Normal temperature is considered to be less than 37.0°C.

Travel Arrangements: If seafarer is not a MSIC holder has seafarer/supernumerary has transit visa been issued? YES ☐ NO ☐ PENDING ☐

Date of Travel	Departure Location	Transportation Phase	Arrival Location	Method/Flight No./Accommodation Details	Self-Isolation/PPE Requirements

Subboard Information: Confirm the ship has implemented self-isolation protocols for joining seafarers - including non-essential personnel not to fill bridge bedding/departure duties? YES ☐ NO ☐ Confirm Master has been advised of requirements to disinfect/joining/seafarers baggage and clothes following prior to travel? YES ☐ NO ☐ Confirm Master has been advised that for 14-days after crew-change if any persons onboard exhibit high temperature or COVID-19 like symptoms they are to immediately notify last Australian agent to alert Australian Health Authorities to allow commencement of contact tracing

Logbook Agent: Port Authority notified - YES ☐ NO ☐ N/A ☐ Port Authority agreed to crew change? YES ☐ NO ☐ N/A ☐ Terminal notified - YES ☐ NO ☐ N/A ☐ Terminal agreed to crew change? YES ☐ NO ☐ N/A ☐ Any additional measures stipulated if crew change refused outline reasons? _____ Any additional measures stipulated if crew change refused outline reasons? _____

I, (insert name) of (insert agency) advise that the information provided in this form is to the best of my knowledge correct and the crew member to whom this form relates has consented that the personal information it contains is being collected in connection with the risks presented by COVID-19, and may be passed onto appropriate stakeholders, health professionals & Commonwealth, State and

2.2.4 Workers' mental and emotional state during lockdown

Many situations can give rise to stress. Personal difficulties, problems at work, tight deadlines, or a health crisis caused by a pandemic can affect us mentally, psychologically, and physically.

In a pandemic situation, the state of workers' emotional health is very important when it comes to the efficiency of their work. Several studies on the emotional and mental state of workers show that depression and anxiety in a pandemic or health crisis negatively impact companies' economic performance. Therefore, it is essential to regularly assess workers' mental health.

Port communities need to keep working during a pandemic to address the needs arising from the exceptional situation, where the importance of logistics and trade activity on a global level is put into focus. In this respect, ports play a strategic role in the supply of products during a health crisis.

In this respect, good human resources management with an emphasis on the emotional side is key to ensure that the port continues to function well. To this end, it is recommended that ports have emotional management plans. These could cover the following aspects:

a) Designation of a representative or contact person for “pandemic emergency situations”

During a pandemic emergency, “people are afraid of infection, of dying and losing their family members,” according to the UN recommendations. At the same time,

⁸ Crew change advice www.bimco.org/ships-ports-and-voyage-planning/crew-support

large numbers of people have lost or risk losing their livelihood, have become socially isolated and separated from their loved ones, and—in some countries—have experienced drastically enforced stay-at-home orders. It is critical at this time to ensure that employees do not face their problems by themselves.

That is why it is important to designate an emergency contact that employees can trust. It should be a person who is trained to recognize the warning signs and has real power to help people in need (some psychological training or background could be helpful). This person should also be in direct contact with senior management.

b) Encourage a work-life balance policy

Work-related stress is a significant cause of emotional problems. Furthermore, shifting to teleworking or an increased work demand in pandemic situations can increase pressure on workers. Therefore, it is important to maintain a balance between work and life.

c) Promote internal dialogue with workers

The emergency situation raises many doubts and generates stress. One of the actions that can help the worker is to talk about how to deal with the situation, doubts, fears etc., with his or her peers. Facilitating conversations on these issues improves workers' emotional state by helping to ensure they do not feel alone and are being understood and supported by the company.

It is extremely important to understand and pay attention to workers' emotional state, to identify any problem that has a negative impact on productivity, as well as to provide the means to improve the situation. Staff managers must dedicate time in crisis situations such as pandemics to making such decisions.

Figure 12: Examples of good practices⁹

HSC Health and Social Care

Take5 steps to wellbeing

Highlight Supports -
Ensure staff are aware of where they can access support services (e.g. helplines, drop-ins, staff wellbeing websites, counselling services).

Supporting Staff - Quick Guide for Managers

COVID-19 has generated unprecedented additional pressures and uncertainties for health and social care services. Many of you will be tasked with forming and leading newly grouped 'teams'. The following suggestions may be helpful in supporting staff through this time.

What can I do?

Staffing -
"This is a marathon, not a sprint". While this situation is undoubtedly a crisis, it is unlikely to be short-term. It may be helpful to focus on longer term occupational capacity rather than repeated short-term crisis responses. Rotate exposure to the most challenging tasks and pair more experienced people with those who more recently qualified or newly arrived.

Promote Breaks -
breaks are essential and may require your initiation and support. If possible, find a space where staff can go to for a short rest when needed.

Hydration and Nutrition -
Consider how this can be facilitated. Are there any specific changes that could be made to the work environment to facilitate opportunities for hydration and nutrition?

Flexible Working -
Implement flexible schedules for workers where this is possible (e.g. working from home, perhaps on rotational basis).

Support Connections -
Bringing the team together for updates and check-ins (using online facilities such as Lync, Zoom or Microsoft Teams) to help people feel connected even if working remotely and enable you to have a sense of how people are doing.

What is important for teams in times of difficulty?

- 1. Psychological Safety**
Clear direction and leadership can help with containment of anxiety. Be open and honest. You don't need to be an expert.
- 2. Belonging**
Demonstrating a sense of empathy with your staff helps people feel understood and valued. Make sure you are able to reach everyone. This may involve the use of different forms of communication but will be appreciated by those you reach.
- 3. Purpose (Mattering)**
With people working above and beyond usual levels, it is important for people to feel connected with a sense of purpose. Remind your staff of the importance of the work they are doing and the contribution they are making to our wider community at a time of significant challenge.
- 4. Don't forget your own wellbeing**
What is good for staff is also good for managers. Remember to take care of your own wellbeing as you lead others.

Points to consider

- What do we already have in place that helps support, nurture or reinforce the team?
- Is there something else we could do?
- What would need to happen for this to be possible?

(informed by WHO Guidance, March 2020)

However, apart from staff support actions carried out by the port, it is also worth proposing some “self-management” guidelines for the personnel. Recommendations for situations both inside and outside the working environment can be useful (e.g., suggestions on how to stay healthy, physical exercise, etc.).

2.2.5 Staff management

The risks of exposure to an infection at work during a pandemic can vary. In part, the level of risk depends on whether or not the jobs require close proximity to potentially infected people, or whether they are required to have repeated or prolonged contact with known or suspected sources of infection (such as co-workers, crew members, outside visitors, suppliers, maintenance, etc.).

To help determine appropriate work practices and precautions, we can look at the example of the United States Occupational Safety and Health Administration (OSHA),¹⁰ which has divided workplaces and work operations into four risk zones based on the likelihood of occupational exposure in the event of a pandemic.

- Very high exposure risk: jobs with a high potential for exposure to known or suspected sources of contagion during specific medical, post-mortem, or laboratory procedures (e.g., frontline health care workers).
- High exposure risk: jobs with a high potential for exposure to known or suspected sources of the infectious disease (e.g., health care workers, medical transport, etc.)
- Medium exposure risk: jobs that require frequent or close contact with people who may be infected, but who are not known or suspected patients. This includes those who may have contact with the general public and personnel returning from high-risk locations.
- Low exposure risk (caution): jobs that do not require contact with people known to be, or suspected of being, infected. However, even at lower risk levels, workers should be cautious and develop preparedness plans to minimize employee infections.

The zones are shown in the form of a pyramid to represent how the risk is likely to be distributed. The vast majority of workers in a port are likely to be in the medium or low risk groups because of possible contact with infected persons or contamination in the handling of goods.

10 Occupational Risk Pyramid for COVID-19 <https://www.osha.gov/Publications/OSHA3993.pdf>

Figure 13: Occupational Risk Pyramid for COVID-19

Based on the risk exposure, it is recommended to adopt targeted safety measures for critical staff. This could allow the continuity of operations while reducing the exposure risk in these key positions. The following are examples of measures that can mitigate the exposure risk:

- ✓ Establish working hour shifts and encourage annual leave to reduce office attendance.
- ✓ Implement a no-visit policy. Allow only authorized employees to enter the office during high-risk situations.
- ✓ Organize flexible working hours, rotating/staggering shifts, or reducing working hours so that fewer workers are on site at the same time.
- ✓ Distribute tasks. If multiple functions perform similar tasks that must be carried out at the workplace, consider grouping and rotating those tasks so that some employees can work remotely while others assume responsibility on site.
- ✓ Encourage virtual meetings. Ensure that employees can switch between in-person meetings and virtual meetings or emails whenever possible.
- ✓ Adopt middle management practices for these new work systems (e.g., how to motivate, keep track, use personnel management applications, etc.).