



**International
Standard**

ISO 41017

**Facility management — Guidance
on emergency preparedness and
management of an epidemic**

*Facility management — Recommandations relatives à
l'anticipation des situations d'urgence et au management d'une
épidémie*

**First edition
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 267, *Facility management*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 348, *Facility Management*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

0.1 Purpose

In order to protect facility users and other interested parties as well as to provide reassurance and protect the demand organization's assets and reputation, an organization should include plans for mitigating the effects of an epidemic in its overall emergency preparedness and business continuity plans.

This document serves as guidance to organizations for effective preparedness for and management of an epidemic. The organization should create its own formal documentation detailing what actions and responses should be followed.

By implementing the guidance in this document, an organization should be able to:

- take effective action to protect facility users and other interested parties from the risks related to an epidemic event;
- demonstrate that it is addressing risks related to an epidemic event using a systematic approach;
- put in place a framework to enable effective and timely adaptation to the changing situation;
- create an emergency response plan (ERP) for an epidemic and integrated it into its overall risk management, emergency preparedness and business continuity plans.

NOTE It is not the intent of this document to reproduce ISO 31000:2018, but rather to provide a framework identifying the assessment processes specifically needed to mitigate the impact of an epidemic on facility management.

0.2 Principle

The safety and the quality of life of facility users and other interested parties is a requirement of the demand organization and organization. At all times, the demand organization and organization should act in a responsible manner to protect the facility users and other interested parties. Specifically, in response to an outbreak or epidemic event, the following examples of principles can be considered:

- the demand organization should conduct an assessment of their requirements and capabilities during the outbreak or epidemic event;
- risk factors and impacts should be anticipated and identified even before an outbreak or epidemic event is confirmed by an authoritative body;
- risk factors and impacts should be reviewed once an outbreak or epidemic event is confirmed by an authoritative body;
- gaps should be identified quickly for resolution;
- a plan should be developed and approved by the organization's interested parties, placed in effect and updated as needed;
- the verified evidence, data and facts should be used in developing facility policies and guidelines; unsupported information from rumours or speculations should not be used in any determining factors;
- the chain of leadership and management should be clearly defined in the organization's ERP;
- collaboration between supporting organizations and departments should start at the planning stage and be maintained during the epidemic event;
- information should be made available as soon as possible with regular updates to all interested parties;
- information should be distributed to the appropriate interested parties; some information can be sensitive and can only be distributed to approved personnel;
- temporary protocols should be implemented at the beginning of the outbreak or epidemic event to promote facility user safety;

- training and education should be provided to enable effective implementation;
- the regulatory variances should be considered.

0.3 Exposure risks

During a normal business day, facility users and other interested parties can be exposed to pathogens before entering and while staying in the building. The guidance in this document addresses those pathogens to which the facility users and other interested parties reasonably are or can be exposed during normal business activities (e.g. transmission via direct/indirect contact, airborne, droplet).

0.4 Challenges

An organization can face challenges if it has to continue operating or return to business during or after an epidemic event.

The guidance in this document can enable the organization to prepare for an epidemic event and provide reasonable certainty regarding the safe conditions of the facility, by:

- protecting the facility user of the managed facility;
- maintaining occupied and unoccupied buildings;
- engaging with facility user reluctant to return to the building;
- managing the economic impact on businesses;
- communicating with internal and external interested parties;
- undertaking cleaning and decontamination activities;
- providing isolation/quarantine spaces as required or directed;
- maintaining the availability of personal protective equipment (PPE), which can be uncertain;
- screening people before they enter the building;
- maintaining the supply chain and logistics;
- controlling communications so that either multiple communications or conflicting information, or both, are not distributed.

0.5 Structure

[Figure 1](#) illustrates the framework structure detailed in [Clauses 4](#) to [10](#) and its relationship to the development stages of an epidemic.

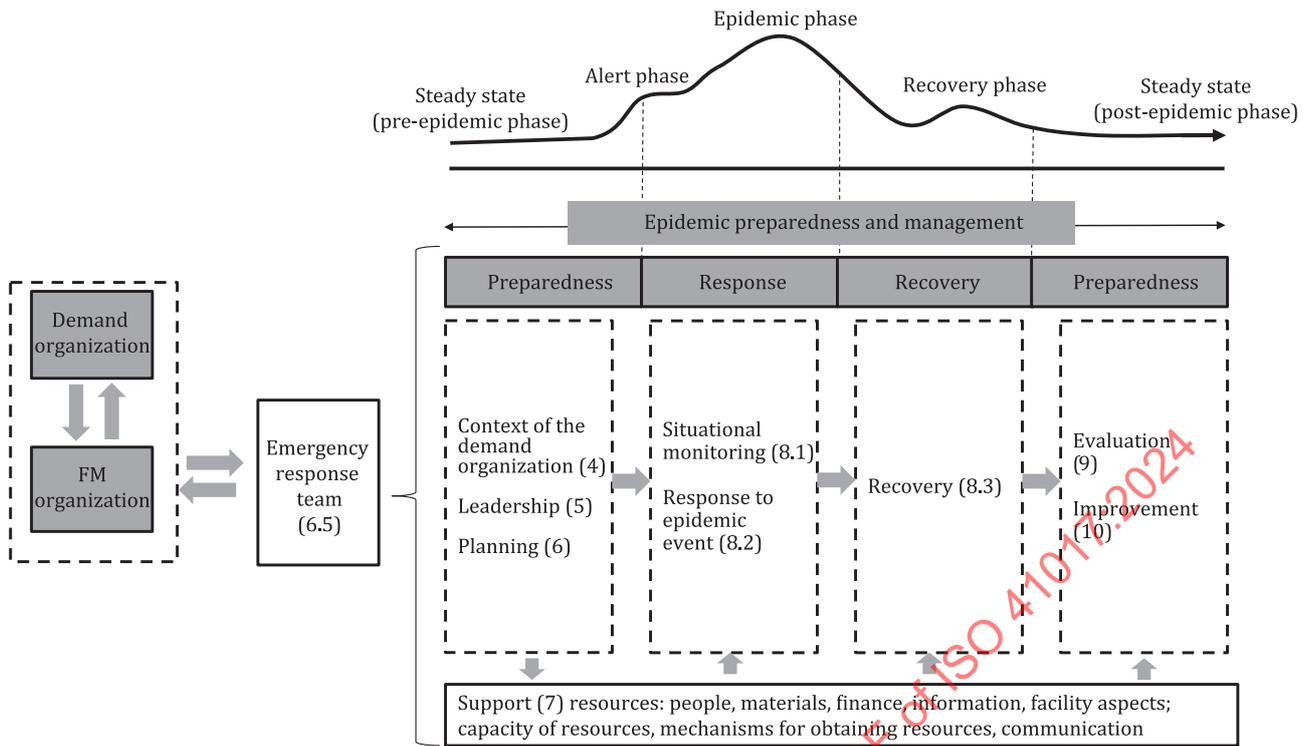


Figure 1 — Framework structure of this document

Facility management — Guidance on emergency preparedness and management of an epidemic

1 Scope

This document provides general guidance to organizations on how to plan for, mitigate and/or manage the risks and impacts of an epidemic event to protect facility-related health, safety and well-being.

This document is applicable to all organizations, fully or partially operating, resuming or new to operating.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 41011, *Facility management — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 41011 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

Note 1 to entry: The concept of organization includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

[SOURCE: ISO 41011:2017, 3.3.1]

3.2

facility management organization

FM organization

entity responsible for facility management

[SOURCE: ISO 41014:2020, 3.1.2]

3.3

policy

intentions and direction of an *organization* (3.1), as formally expressed by its top management

3.4

risk

effect of uncertainty on objectives

Note 1 to entry: An effect is a deviation from the expected. It can be positive, negative or both, and can address, create or result in opportunities and threats.

Note 2 to entry: Objectives can have different aspects and categories, and can be applied at different levels.

Note 3 to entry: Risk is usually expressed in terms of risk sources, potential *events* (3.10), their consequences and their likelihood.

[SOURCE: ISO 31000:2018, 3.1]

3.5

lessons learned

knowledge distilled from the performance of a process, activity or *event* (3.10) and used to improve future performance

[SOURCE: ISO 41014:2020, 3.5.5]

3.6

outbreak

increase in cases of an infectious disease in excess of what is normally expected in a particular location, community or geographical region in a specified time period

Note 1 to entry: An outbreak can affect a small and localized group or multiple groups and places and can result in an epidemic or pandemic.

Note 2 to entry: Two linked cases of an infectious disease can be sufficient to constitute an outbreak.

[SOURCE: ISO 45006:2023, 3.11]

3.7

epidemic

large number of cases of a particular infectious disease, occurring at the same time in a community or geographic region

[SOURCE: ISO 45006:2023, 3.12]

3.8

pandemic

worldwide spread of an infectious disease

Note 1 to entry: A pandemic is declared by the World Health Organization (WHO).

[SOURCE: ISO 45006:2023, 3.13]

3.9

incident

event (3.10) that can be, or could lead to, a disruption, loss, emergency or crisis

[SOURCE: ISO 22300:2021, 3.1.122]

3.10

event

occurrence or change of a particular set of circumstances

Note 1 to entry: An event can have one or more occurrences, and can have several causes and several consequences.

Note 2 to entry: An event can also be something that is expected which does not happen, or something that is not expected which does happen.

Note 3 to entry: An event can be a risk source.

[SOURCE: ISO 31000:2018, 3.5]

3.11
emergency response plan
ERP

systematic procedures that clearly detail what is to be done, how, when, and by whom before, during and after the time an emergency occurs

Note 1 to entry: In some jurisdictions, it can be called “emergency and remedial response plan”, “contingency plan”, etc.

Note 2 to entry: Emergency response plans often also cite preparations to be completed before an emergency occurs.

[SOURCE: ISO 27917:2017, 3.4.12, modified — the abbreviated term has been added.]

3.12
emergency response team
ERT

group of individuals responsible for developing, executing, rehearsing and maintaining the response plan, including the processes and procedures

[SOURCE: ISO 28002:2011, 3.48, modified — “emergency” has been added to the term and the abbreviated term has been added.]

3.13
personal protective equipment
PPE

device or appliance designed to be worn by an individual for their protection against one or more health and safety hazards

Note 1 to entry: PPE includes, but is not limited to, gowns, gloves, respirators, safety glasses, helmets and goggles.

Note 2 to entry: While generally not considered PPE, masks and other face coverings can provide a level of protection for the user in addition to their primary purpose as a public health measure to control the spread of transmission and infection.

Note 3 to entry: In many countries PPE, is required to conform to national regulations.

[SOURCE: ISO 45006:2023, 3.5]

3.14
interested party
stakeholder

person or organization that can affect, be affected by or perceive itself to be affected by a decision or activity

[SOURCE: ISO 41011:2017, 3.3.3]

3.15
facility user
person who uses a facility

EXAMPLE Building occupants, residents, workers, customers and other relevant interested parties.

4 Context of the demand organization

4.1 General

Understanding how a demand organization anticipates, plans for and responds to an emergency or crisis event, especially one that can affect its need for, and impact on, facility management (FM) and facility services, is a key consideration for its top management. The set of beliefs and behaviours that people share in an organization can define its approach to how work gets done. When developing an ERP for epidemic, the FM organization in conjunction with demand organization team should work within the existing values,

expectations and practices of the demand organization with the goal of gaining participation and support from interested parties during planning and cooperation during an emergency event.

The organization should develop a collaborative relationship with interested parties. Developing a collaborative relationship involves behaviour that includes:

- accountability;
- transparency;
- inclusiveness;
- empathy;
- respect;
- trust;
- privacy;
- disclosure of conflicts of interest;
- financial responsibility;
- integrity;
- lawfulness;
- diversity.

4.2 Operation impact

4.2.1 General

An epidemic can have an immediate, delayed or lasting impact and can vary in severity from business to business. The timing of the epidemic within the business cycle can also influence the degree of impact within the demand organization. Contingency planning and timely activation of the ERP can influence the impact of an epidemic on a business. The organization should identify the potential impacts and consider mitigation strategies.

Impacts can be categorized as operational impact (see [4.2.2](#)), employee impact (see [4.2.3](#)) and other interested party impact (see [4.2.4](#)).

4.2.2 Operational impact

Operational impact can be categorised as given below:

- a) Product and service demand: Client priorities, and purchasing appetite and ability can change either positively or negatively, impacting demand levels. In some instances, demand can remain; however, purchasing avenues can change (e.g. in person shopping to online). Demand can diminish entirely as consumer preferences or requirements move entirely to a different product type or service model.
- b) Supply chains: There can be a shortage of labour for production or services, as well as shortages or changes in the levels of material and resource availability.
- c) Capacity to deliver products and services in a changed environment resulting from travel restrictions or a lack of resources to support the increases in demand. Alternatively, decreased demand can redirect support services in a changed direction, impacting capacity to deliver or service.
- d) Capability to deliver products and services in a changed environment resulting from changes in transport and shipping, either due to labour shortages or restrictions of movement (imposed by the government or by businesses).

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- e) Expanse of epidemic impact, whether locally, regionally or internationally. Local impacts can be more easily managed; however, the more expansive the epidemic, the greater the impact as it can affect a greater component of both consumers and service and product providers.
- f) A plan of all built environment assets should be developed, including the capabilities to mitigate the impact of an epidemic. Furthermore, the plan should capture the relative criticality of facilities with respect to business impact and mission. It is important to have a plan for the use of facilities and their assets in case of an epidemic, and the value of an asset's (facility's) specific contribution to the performance of the business' mission.
- g) Logistic impact: The impacts felt by the business and facility can be mirrored across business to business, and is not limited to business to customers.
- h) Process impact can include the following:
 - Regulatory: The validity currency and relevance of processes, procedures and regulatory obligations can be impacted, requiring review and resulting in amendments or a total reassessment. A timely response influences the degree of impact experienced. This impacts not only supply and service provision, but also the requirements and guidelines pertaining to a changed working environment (partial, fully or remote).
 - Conduct of business: Communication and guidance should be facilitated to support clients, staff and external interested parties.
 - Emergency preparedness: Emergency preparedness which can be impacted on every level irrespective of epidemic severity. It should be considered whether emergency support personnel are sufficient in number (accounting for absenteeism) and whether upskilling or training is required for additional personnel. The emergency evacuation plan, as well as associate evacuation diagrams, should review to ensure its relevance and to provide a safe and efficient path of evacuation.

4.2.3 Employee impact

Employees can be directly impacted through infection, mental health, welfare or restrictions on movement. This impacts the business ability to deliver through a changed or diminished workforce. Changes can include the following:

- a) Workplace: Employees can continue to work from an office environment, but do not want to due to health and safety concerns. Offices can be restricted due to physical distancing requirements or can require sanitizing, preventing access for a period of time.
- b) Site-based, remote or hybrid work arrangements: The business can require the ability to facilitate a hybrid or single working model, depending on type of business or facility. This can impact the capacity and capability of the facility to continue to operate. The capacity by businesses to continue to operate, is not limited only to employee willingness and ability, but also by the business to support logistic and Internet of Things (IoT) requirements. The provision of these products or services are also likely to be impacted, therefore forward planning and resourcing is paramount.
- c) Health and welfare: Facility managers in unison with employers and employees have an obligation to provide and conform to a safe working environment.
- d) Support and training, including change management and training support to re-skill or upskill employees to support the ongoing viability of the business and its employees: The degree of impact influences whether re-training or upskilling is viable and/or necessary in response to the changed environment.

4.2.4 Other interested party impact

There can also be an impact on visitors to the building, e.g. customers, contractors or other visitors. Attendance should be facilitated in a safe and practical manner. This can require isolation locations, physical distance requirements and communication, and a restriction on the number of visitors to the facility at any one time. To be able to facilitate these requirements, resourcing considerations can include control factors, signage and communication, and wardens or security considerations.

The impact can be such that, due to stipulated restrictions, attendance at the facility is entirely removed, requiring the business to consider alternative ways to provide service to its clients.

5 Leadership

5.1 Leadership and commitment

5.1.1 General

Top management should demonstrate a commitment to the health and safety of its facility users and other interested parties. Top management should also protect the interests of facility users by adopting and adhering to emergency management principles. Commitment involves not only planning for emergencies, but also continually reviewing and updating the plan to ensure its appropriateness.

5.1.2 Emergency management principles

To ensure its commitment to the health and safety of the facility users during an epidemic, leadership should demonstrate a commitment to emergency management principles.

With respect to the epidemic, emergency management planning should be:

- Professional: It should value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continual improvement.
- Risk-driven: It should use sound risk management principles (hazard identification, risk analysis and impact analysis) in assigning priorities and resources.

NOTE Risk management principles are given in ISO 31000.

- Collaborative and communicative: It should create and sustain broad and sincere relationships among all interested parties to encourage trust, advocate a team atmosphere, build consensus and facilitate communication while providing timely information.
- Comprehensive: It should consider all hazards, phases, interested parties and impacts relevant to the epidemic event.
- Integrated: It should ensure unity of effort among all levels of the organization, including internal and external interested parties.
- Coordinated: It should synchronize the activities of all relevant internal and external interested parties to achieve a common purpose.
- Participation: The organization should encourage participation of facility users to facilitate better understanding of infectious agents that can impact the organization as well as other hazards and risks related to infectious diseases and health outcomes.
- Flexible: It should use creative and innovative approaches in solving epidemic challenges.
- Progressive (preparedness): It should anticipate future recurrence and take preventive and preparatory measures to build resilient communities.

5.1.3 Scope of FM

The scope of facility-related emergency management varies depending on the facility type and the nature of the core business of the demand organization. The FM organization should determine the boundaries and applicability of FM to establish its emergency management plan scope with consideration for the interested parties' requirements.

5.1.4 Overall objectives

The organization should set facility-related emergency management objectives in regard to preparedness and response to an epidemic. The following factors should be considered, but are not limited to:

- people's safety and the well-being of the demand organization and interested parties;
- variations in local, governmental and health agency policies and guidance.

5.2 Policy

Top management should establish the epidemic emergency management policy based on the principles of emergency management and the scope and objectives of FM.

New policies should address new work conditions, whether on site or from a remote location.

The FM policy should align with the demand organization and take into account the nature of the epidemic characteristics, including the following considerations, such as:

- physical distancing;
- quarantine/isolation;
- facility modification, closure and re-opening;
- environmental factors, such as cleaning and indoor environmental quality/indoor air quality (IEQ/IAQ);
- travel;
- visitors;
- contact tracing;
- appropriate PPE;
- personal hygiene;
- working from home/remote work;
- testing requirement/vaccination requirement and immunization status;
- privacy;
- occupancy capacity/group size limitations;
- communications;
- monitoring;
- reporting.

If these policies are interim policies, the organization should provide reviews to determine when the policies can be relaxed or terminated, or if they should be modified or escalated.

5.3 Roles, responsibilities and authorities

Roles and responsibilities should be clearly defined and communicated to avoid confusion and non-compliance with the organization's policy and procedures, and the requirements and directions of the relevant authorities. See [6.5](#) regarding the emergency response structure.

Consideration should be given to the following areas with regard to clearly defining roles and responsibilities in the emergency management plan:

- monitoring and reporting of the epidemic;

- communication (internal and external);
- training;
- authorization for building modifications, closure and re-opening;
- refusing entry or removing a facility user from the facility;
- authorization to modify policies;
- administering first aid;
- the need for effective engagement of facility users.

6 Planning

6.1 General

The constitution and severity of an emergency and its potential or actual impacts on facilities are many and varied.

A response to an epidemic environment or emergency may include many of the plans and processes already in situ within the facility, but with appropriate amendments and process development in support of the facilities' ERP and capability.

To support business continuity, the ERP should be a living document, requiring an extended view, and involving regular review, testing and application. With the different stages of epidemic development, the plan should be continually updated and communicated, understood and supported across all areas with active involvement and engagement.

6.2 Actions to address risks

The organization should consider the impacts listed in [4.2](#) and address the risk associated with the epidemic. When developing the ERP for the epidemic, the organization should take an all-hazards approach and pay attention to the risks arising from the epidemic preparedness and response. To ensure effective planning, top management should communicate the impact and criticality of identified risks.

Risks arising from epidemic preparedness and response are listed below, but are not limited to:

- people-related: for example, the risk of transfer of infected persons and the infection of asymptomatic infected persons;
- places-related: for example, cross-infection can be brought by recirculation or short circuiting of fresh air systems;
- process-related: for example, potential risks arising from waste streaming, recycling of materials, and handling of cleaning chemicals and materials;
- environmental factors: for example, IAQ/IEQ.

Plans and strategies should incorporate the basic principles known to be imperative in controlling infection during an epidemic at the time of the event. The treatment for risks can include, but is not limited to:

- adjusting administrative controls;
- adjusting engineering controls;
- promoting improved hygiene practices;
- ensuring the availability of sanitization products;
- updating the cleaning regime;

- implementing physical distancing;
- providing and encouraging the use of PPE;
- occurrence awareness, intelligence, early warning and monitoring;
- educating and training all facility users on the revised ERP;
- educating and training the emergency response team (ERT) to coordinate an emergency response.

NOTE ISO 31000 gives an overview of risk identification, analysis, assessment and treatment.

6.3 Emergency preparedness for an epidemic

Specific considerations exist that should be accounted for within the organization's ERP to address an emergency that involves an infectious outbreak such as can be found during an epidemic. The organization can ensure it has an epidemic plan complementing its facility ERP.

In response to an epidemic, facilities require an emergency plan to address the health and safety of facility users, the sudden impact to the capacity to continue business activity and facility operation, and the ability to reasonably avoid contamination of the facility.

To be proactive and responsive to an epidemic event, the organization can ensure it remains up to date with intelligence from local and regional authorities via early warning mechanisms as well as publicly available information.

Important attributes of an outbreak should be taken into account to support a facility's preparations, such as whether an outbreak:

- is swiftly moving, indicated by multiple infections within the populace;
- is highly contagious and therefore difficult to contain;
- has abundant information, sparse information or misinformation shared about it; identifying correct and current information that is accurate and relevant to the facility, and communicating to interested parties appropriately.

6.4 Emergency response plan considerations

Generally, when the ERP is prepared, most considerations start from how to apply, as a minimum, the following three key approaches of infectious disease propagation prevention:

- preventing exposure to the infectious agent;
- removing or reducing transmission routes;
- protecting people who can be more vulnerable to risks related to the infectious agent.

A full and detailed analysis of practical methods to apply these approaches on site should be undertaken. This analysis may consider information pertinent to infectious agent and a control actions list can be compiled.

Control actions should follow the latest updated guidance or suggestions on the epidemic from authoritative professional parties (e.g. World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), International Labour Organization (ILO) or a government health department, see also [7.1.5](#)).

Based on the control actions list, the ERT can then develop a dedicated operational response plan of the targeted facility in line with the resources schedule (see also [7.1](#)).

An example of epidemic control actions within an office facility can be found in [Annex A](#).

6.5 Emergency response team and structure

The organization should establish an ERT for emergency preparedness and response. The ERT, via consultation, with facility users and interested parties, and eventual top-level ratification can provide the outputs for the ERP to facilitate the desired outcomes. Setting success criteria for these outcomes to be gauged against enables focus during the planning stage and measurement of success at the review stage.

The organization should implement an incident management structure to carry out the tasks relevant to objectives of emergency management in an epidemic. The ERT can be structured to include representation from all core and supporting departments or business elements within the organization.

The following structure and typical functions are suggested as part of an ERT:

- command: authority and control of the epidemic; epidemic prevention emergency management objectives structure and responsibilities; requesting and approving of resources;
- planning: collection, evaluation and timely sharing of incident information and intelligence; status reports including assigned resources and staffing; development and documentation of an epidemic action plan; information gathering, sharing and documentation;
- operations: tactical objectives; hazard reduction; protection of people, property and environment; control of epidemic and transition to recovery phase;
- logistics: epidemic prevention support and resources; facilities, transportation, supplies, equipment maintenance, fuel, food service and medical services for incident personnel; communications and information technology support;
- finance and administration: compensation and claims; procurement; costs and time.

Depending on the scale of the epidemic, a separate financial and administrative function is not always necessary.

The organization should define and document the minimum staffing requirements to immediately initiate and continuously maintain the organization's epidemic prevention emergency management.

6.6 Exercise programme

In the preparedness stage, the organization should plan, conduct and improve an exercise programme for an epidemic in order to:

- validate policies, plans, procedures, training, equipment and inter-organizational agreements;
- clarify and train personnel in roles and responsibilities;
- improve inter-organizational coordination and communications;
- identify gaps in resources to improve individual performance;
- identify opportunities for improvement and controlled opportunities to practise improvisation.

Relevant parties should practice the implementation of ERP regularly, using methodologies such as desktop exercises, role-play practices or simulations. In addition, the demand organization and FM organization should have regular disaster management and recovery scenario training; it is recommended that epidemic management is incorporated into these regular sessions. The frequency of these exercise programmes should be documented and adhered to.

7 Support

7.1 Resources

7.1.1 General

Holding or having prompt access to specialist resources is critical to establishing safe and healthy conditions for facility users. The organization is responsible for ensuring the threats and risks have been considered for effective controls and countermeasures to reduce impacts to facilities and facility users.

The organization should prepare a comprehensive list of the resources that are appropriate for the potential threat and the vulnerabilities of the facilities (i.e. infection, contagion) and identify and confirm sources.

The organization should identify required resources that are needed to effectively reduce the risks related to the epidemic and ensure sufficient resources are in place. The organization should consider aspects such as the following:

- people (see [7.1.2](#));
- materials (see [7.1.3](#));
- finance (see [7.1.4](#));
- information (see [7.1.5](#));
- facility aspects (see [7.1.6](#)).

7.1.2 People

The organization should determine and provide the required personnel to effectively manage the response to the epidemic emergency and associated policy, including, but not limited to:

- knowledgeable persons within the organization who are prepared to develop strategies, to administer response activities and to coordinate with the prime units within the demand organization (executive, human resources (HR), health, safety and environment (HSE), security);
- capable consultant specialists to support facility-related epidemiological and medical advisory needs (the ERT should compile a list of these specialists);
- persons for the operation and control of its processes.

Awareness training, appropriate to the target audience, should be provided to facility users, staff (new and existing) and other interested parties.

7.1.3 Materials

The organization should identify the materials required to respond to an epidemic, according to guidance from national and international resources, such as:

- WHO;
- ILO;
- national governmental health agencies;
- local government resources or authorities having jurisdiction.

Pre-planning for general purpose materials can be completed by the organization in cooperation with the ERP, disaster response or business continuity teams in the demand organization. The list of required materials can include the following aspects, but is not limited to:

- PPE;

- cleaning agents, disinfecting agents, neutralizing agents;
- disposal tools and supplies;
- controlled storage of contaminated items.

A risk analysis exercise can reveal the most likely scenarios and what materials would be most effective.

7.1.4 Finance

The organization should coordinate with the finance and risk management units to propose and fund budget requirements to meet pro-active, pre-emptive and potential expenditures, including:

- top management should approve supplemental spending to meet the requirements;
- the ERT and risk management units (or similar) should guide the process.

7.1.5 Information

The organization should liaise with relevant departments, including, but not limited to, risk management units and HR offices to confirm what sources should be accepted as factual and credible information from which decisions and actions can result. A list of acceptable sources of information should be included in the organization's planning documentation. The list should include global, national and regional risk advisory systems or the equivalent. These may be government sources or agencies with some authority to speak on public health matters.

7.1.6 Facility aspects

The FM organization should also consider the following aspects including but not limited to:

- a) defining spaces for specific uses relevant to persons affected by toxic, contagious and infectious agents (e.g. negative pressure, non-recirculated conditioned air, 100 % exhaust), including:
 - 1) isolation spaces, i.e. spaces used when infections are confirmed;
 - 2) interim segregated spaces, i.e. spaces used during investigation and testing;
 - 3) waste and disposal collection areas, which are segregated, and providing sealed containers to prevent contamination;
- b) supplementing contracts to add the safe and legal disposal of contagious, infectious, biological and toxic materials;
- c) environmental factors, e.g. IAQ/IEQ.

7.2 Capacity of resources

The organization should determine the quantity of required resources that are listed in [7.1.1](#) to [7.1.6](#). The quantity of required resources should effectively reduce the risks related to the epidemic and ensure sufficient resources are in place.

Involved employees and consultants should be trained to meet relevant competence requirements.

All facility users should be required to wear appropriate PPE and be trained in its safe use. As necessary, ongoing training should be provided to facility users to encourage and ensure appropriate behaviours.

All PPE and relevant tools and supplies should be compliant with relevant registrations and ratings to meet or exceed standards of contagion, infection or toxicity.

7.3 Mechanisms for obtaining resources

The organization should establish processes to help ensure that essential resources are maintained, appropriately managed and can be supplied reliably as needed.

The procurement unit of the demand organization can complete sourcing of the resources on a priority basis to meet the extreme nature of the health challenges.

The organization can consider the following aspects, but which are not limited to:

- people: training and reallocation, outsourcing;
- supply chain (suppliers): procurement, public services;
- response time.

7.4 Communication

7.4.1 General

The epidemic plan should be understood and clearly communicated to all facility users and other interested parties. A communication plan forms an important component in the successful execution of any plan.

The organization should develop a consistent communication format, ensuring appropriate outreach to all relevant interested parties according to the development of the event. Communication is two ways; it should be made clear to employees to whom and how they can communicate their concerns regarding the situation.

The organization should:

- clarify the internal and external communication channels and methods of the organization;
- ensure that communication equipment and facilities are available;
- ensure that effective procedures and facilities are in place;
- manage the organization's response to the media and ensure that it complies with the organization's communication strategy;
- record important information about epidemic events, actions performed and decisions made.

7.4.2 Communication applicable to internal interested parties

The organization should communicate the following information to internal interested parties:

- consequences to the business;
- how they can be personally impacted;
- what is necessary for compliance.

7.4.3 Communication applicable to external interested parties

The organization should communicate the following information to external interested parties:

- its capacity for delivering goods/services;
- proof of its compliance with regulations;
- rules for engagement during the epidemic including with authorities.

8 Operational planning and control

8.1 Situational monitoring

8.1.1 General

The ERP should take into account advice on the characteristics of infectious diseases, taking advice from trusted bodies (e.g. public health bodies, specialists). The facilities business continuity plan should be reviewed to ensure it aligns, supports and enhances the organization's epidemic prevention plan.

During the epidemic and alerting period, the FM organization should constantly monitor the epidemic and associated risks, ensuring the response plan for epidemic prevention is appropriate and suitable.

The organization should monitor all relevant aspects related to epidemic situations that can pose a risk to its staff, clients or other users, or influence business performance, competitiveness and sustainability.

8.1.2 Incident detection

The organization should identify how to differentiate a business-as-usual situation from an incident or event. This differentiation – and applicability to each situation – can vary depending on the nature and impact of the incident or event. While an incident or event can be global, it can equally be something that affects a specific region, a specific business segment or a specific production line or department.

It is important to understand that each division or department can have different levels of impact, according to the development of the event. The organization should also define how to identify those levels, and which elements or group of elements necessitate a change from one level to another.

Once an event is identified, the organization should formalize this situation, at all relevant levels, considering all key interested parties at the individual and group/department level. Interested party involvement and responsibility can vary depending on the level of impact of the event, and the organization should formalize significant changes in the impact level to each division.

There are three considerations:

- a) Global pandemic conditions: The WHO publicly discloses emergency health incidents of infectious disease(s) and announces the outbreak of global infectious disease(s). This should activate the organization to initiate measures to respond to the pandemic based on the organization's action plan.
- b) Regional epidemic conditions: The WHO, the national public health department or the administrative departments at all levels in the region publicly disclose emergency health incidents of infectious disease(s) and announces the outbreak of regional infectious disease(s). This should activate the organization to initiate measures to respond to the epidemic based on the organization's action plan.
- c) Outbreak/cluster conditions: An epidemic case found in a certain business function or production line related to the demand organization should activate the organization to initiate measures to respond to the outbreak based on the organization's action plan.

8.1.3 Regular monitoring of an incident/event

The organization should prioritize monitoring an event and its evolution. The sources utilized to monitor the event should be reliable and regulated. A list of acceptable sources of information should be included in the organization's planning documentation. The list should include global, national and regional risk advisory systems or the equivalent. These may be government sources or agencies with some authority to speak to public health matters.

Events can differ in the impact they have, based on the specific local conditions that the organization operates in. These local impacts are what should be considered when considering any actions that should be taken (see also [8.1.2](#)).

The organization should ensure that effective procedures and facilities are in place to receive, record and respond to warnings, alarms and external communications from a national or regional risk advisory system or equivalent systems.

8.1.4 Response to a warning or alert

The organization should prepare for foreseeable emergencies by reviewing existing epidemic warnings and alerts. If necessary, the existing ERP, policies and processes should be revised.

8.1.5 Alerting interested parties

The communication should consider changes in format and frequency, according to the level and impact of the event. When locally pertinent information is released (see [8.1.3](#)), the organization should release information appropriate to the interested party pertaining to how the event can impact operations.

8.2 Response to an epidemic event

8.2.1 ERP clarification

The organization should consider how the existing ERP (see [6.4](#)) and support mechanisms (see [Clause 7](#)) are or are not appropriate to the situation as it develops.

The ERP should be produced as an official document and sent to the various departments that need to take actions or are affected by the actions (this can be company-wide).

The organization should:

- solicit opinions from internal and external interested parties, evaluate the content of feedback and incorporate constructive feedback into the newly revised ERP;
- if substantial changes have been made to the ERP, submit newly revised plan to top management.

8.2.2 Process and procedures

The organization should distribute the updated processes and procedures for the activation, operation, coordination and communication of the response to the appropriate parties and provide training as applicable (see also [8.1.4](#) and [8.1.5](#)).

8.2.3 Escalation procedures

The responses as outlined in [8.2.2](#) should be proportional and graded based on the information gathered under [8.1.2](#) and [8.1.3](#).

8.2.4 Implementation of the appropriate response

The organization should implement the updated ERP, ensuring that appropriate processes are in place to monitor that the desired outcomes are achieved or that appropriate corrective action can take place.

8.3 Recovery

8.3.1 Facility conditions

If actions have been taken to alter the normal operation parameters of the facility, these should be addressed. This may be in respect to the following non-exhaustive list:

- a) building systems/services: water storage and delivery, ventilation, power, safety systems, cleaning regimes, etc.;

- b) facility users: mitigating anxiety, supporting leadership/ human resource policies for deciding who returns to work, providing the necessary support/cleaning equipment to support the back-to-work plan, including providing occupancy levels to the leadership;
- c) access control: signage, restricting numbers, changing facility access points, supporting/enforcing protocol for safety and health checks, logistics and mailroom protocols;
- d) communications: reporting on actions taken, communications to facility users, regular updates.

These actions should be reviewed if further changes are made to the facility's operational parameters.

8.3.2 Updating service level expectations

The organization should continue to update its service level expectations within a predefined time frame (see 6.2). These changes can reflect a temporary/transitory period or may be considered as the new normal operational parameters for the facility.

8.3.3 Relaxation of epidemic policies

The organization should relax epidemic policies and return to normal policies or modified policies.

9 Evaluation

9.1 Monitoring measurement and evaluation

9.1.1 The organization should determine the scope to be monitored according to the identified risks (see 6.2), ERP (see 6.4) and support (see Clause 7). This includes:

- a) what needs to be monitored and measured;
- b) when to monitor and measure, including:
 - regularly;
 - after a major change within or around the organization;
 - after a major infection;
 - if the organization deems it appropriate;
- c) how to monitor and measure;
- d) whom to monitor and measure.

9.1.2 The organization should evaluate the consistency and effectiveness of the policy, objectives and operations. The results from monitoring and measurement should be evaluated. The organization should determine:

- a) the methodology for evaluation;
- b) whom to evaluate;
- c) the results of the evaluation, including:
 - whether the desired objectives have been achieved;
 - any nonconformities and the feedback to be given.