



Basic Pandemic Preparedness Planning and Response Guidelines

(French version in progress).

The information contained in this document had been developed in regard to an influenza virus. It has been lightly updated, and it can assist you in thinking about the components of a robust pandemic plan that can fit your company's needs.

A pandemic can occur at any time, with the potential to cause serious illness, death and substantial social and economic disruption throughout the world. Experts agree that future pandemics are inevitable, but the timing of the next pandemic cannot be predicted. Since there may be little warning, contingency and business continuity planning is required to minimize the devastating effects of a pandemic.

The threat of a pandemic that could affect electricity sector companies' ability to maintain the reliable operation of the grid is real and increasing. Emergency preparedness and response plans need to be reviewed and revised to address this emerging threat.

While many electricity sector companies are taking action to address this emerging threat, a consistent and common approach is helpful to ensure that plans and actions are appropriate and consistent, particularly as they relate to the reliability of the interconnected grid.

In addition to addressing the real risks facing the industry, the plan needs to recognize that perceptions, including appropriate level communications, are required to ensure preparedness and response.

Planning Objectives and Initiatives

- a) Develop consistent planning assumptions regarding expected staff absences, remote work and duration, (based on information received from medical experts).
- b) Share the expected impact on the interdependent functions necessary to support the continued reliable operation of the electricity system.
- c) Develop plans to mitigate the impact of staff absences on system reliability.
- d) Ensure digital and IT infrastructure can support increased remote work.





- e) Be cyber aware: Consider cyber security implications of increased remote work and consider the potential of increased cyber threats (ie. Phishing attempts) in times of emergency.
- f) Develop common definitions for stages/phases of response.
- g) Consult with Local, Provincial, Federal and International Public Health units as the credible and consistent points of contact for information, advice and guidance.
- h) Periodic communication with staff is critical to mitigate fears that staff may have, and work to combat disinformation that may be shared by unreliable sources online is important. Develop key communications messages stressing the importance of proper hygiene practices and to describe your preparedness planning and response measures. Provide staff with applicable local, national and international websites containing information and answers to frequently asked questions etc.

Planning Assumptions

- a) The duration of Pandemics can be 6 months and longer.
- b) Pandemics could spread in 2 or more waves.
- c) Plan on actual staff absenteeism during a pandemic to be 10% higher due to staff being absent to care for sick family members.
- d) Initially the outbreak could be expected to be localized “hot spots” that are followed by large concentrations.

Stages of Response and Response Measures

Each stage builds on the one before it (e.g. stage 3 implies that all steps in stages 1 and 2 are completed previously/simultaneously)

Stage 1, Current Situation

- Ongoing communication/training with staff regarding the importance of proper hygiene, and the need for them to seek medical attention and to contact their supervisor in the event that they contract the illness.
- Develop informational digital or print materials to be shown at safety meetings and shared with staff.





- Set up a monitoring process of the Public Health Agency of Canada and World Health Organization (WHO) website and media accounts. The US Center for Disease Control and Protection (CDC) website may also have helpful material.
- Review Business Continuity and or Emergency Response Plan, including an update of all contact information and resources.

Stage 2, Human to Human Transmission

Illness outbreak confirmed by Public Health. Cases of human to human transmission have been documented, but no cases have breached continental boundaries. (Provincial or Federal Public Health or the WHO will verify the threat).

- Communicate to staff, based on recommendation from Public Health. Communication will include reminders on personal protection (hand washing, cleaning workstations/telephones between shifts, stay 1 meter apart, avoid unnecessary contact with other staff), and on where to find accurate information.
- Emergency Preparedness/Business Continuity planners, Occupational Health Nurse, Staff Physician and other company Health and Safety staff to meet weekly, or more frequently, to assess situation and potential impact to company.
- Set up weekly, or more frequent, briefings with the Senior Management Team.
- Review contact information and information sources found in your Pandemic Plan to ensure they are accurate.
- Early consideration made in regard to policies and resources to accommodate and support potential increased remote work, and related security and operational issues.

Stage 3, Breached North American Boundaries

Threat has breached continent but not breached provincial boundaries. Human to human transmission is rapid.

- Consideration shall be given for restricting out of province business travel by staff.
- If out of province business travel is not restricted, consideration shall be given to direct staff that travel to 'high risk' locations, upon their return, that they are to work from home for the quarantine period that is advised by public health.





- Consideration shall be given to request staff to advise their supervisor/manager of out of province personal travel destinations.
- Consideration shall be given to activate the Emergency Operations Center.
- Invoke a sign-in policy at all company sites. Sign-in policy will include a questionnaire regarding recent travel to high-risk areas.
- Consideration shall be given to providing essential staff (i.e. control room staff) with training on proper use of personal protective equipment (wearing of masks, gloves and gowns).
- Consider limited or refusal of out of province visitors to any company site.
- Consider limiting meetings between sites and imposing conference calls with all outside entities.

Stage 4, Breached Provincial Boundaries

Threat has breached provincial boundaries; there are confirmed cases within the province.

- Conduct a conference call of your Emergency Operations Center and or Senior Management to discuss the threat and determine appropriate response measures including establishing contact with Provincial, and local Public Health officials for their support.
- Staff Physician or alternate to call the 'Health Care Hot Line' for advice and guidance including the timing for the administering of a vaccine if available for essential staff.
- Consideration shall be given to activate the Emergency Operations Center.
- Consideration shall be given to imposing staff segregation at business-critical facilities including the control room and customer call center.
- Consideration shall be given to impose restrictions on visitors attending business meetings, excluding delivery personnel, at high transit office locations.
- Consideration shall be given to impose a travel ban between company sites.
- Consideration shall be given to limit travel around province.
- Consideration shall be given to instruct staff to utilize conference calls to conduct meetings and to restrict personal contact in conducting their business.
- Consideration shall be given to instructing staff to work from home/stay at home if demonstrating the symptoms of the illness.





Stage 5, Confirmed Cases within Industry

- Activate the Emergency Operations Center. Instruct your Emergency Operations Center position holders to either convene in a conference room or utilize conference calls. Conduct daily briefing of your Senior Management.
- Contact Public Health seeking vaccines if available for essential staff.
- In consultation with your staff physician or their alternate, consideration will be given to contact Provincial Ministry of Health seeking vaccines, if available, for your essential staff.
- Consideration shall be given to provide essential staff (control room staff) with personal protective equipment i.e., masks, gloves and gowns.
- Consideration shall be given to contact a cleaning agency to clean workstations of all essential shift personnel at the control room.
- Consideration shall be given to alternate shifts between backup control room and the control room to maintain 'clean' crews. Staff will not rotate between sites. Consideration will be given to instruct non-critical staff to stay at home/work from home.
- Consideration shall be given for implementing the plan for provisioning the Control Room(s) with food for essential staff.
- Consideration shall be given for implementing the plan for taking care of essential staff family members.

Stage 6, Confirmation of Pandemic, with major impact to company

- Activate the Emergency Operations Center and or other applicable emergency management/response centers. Conduct daily and periodic conference calls.
- Track staff absenteeism daily.





Pandemic Preparedness Best Practices

Maintain Awareness and Communicate:

Staff Physician or Occupational Health Nurse shall monitor for health threats via official web sites and social media accounts: Public Health Agency of Canada Health Canada, as well as World Health Organization, and US Centre for Disease Control, as necessary.

Canadian websites for COVID-19 information -

Public Health Agency: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>

Additional links to sites

WHO: <https://www.who.int/health-topics/coronavirus>

CDC: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

- Initiate a meeting with your local Public Health Unit to establish points of contact with phone numbers and identify the criticality of operations including mutual inter-dependencies, the loss of which would have a direct and serious detrimental impact on the public.
- Collaborate with Local Public Health unit on the enumeration of vaccine shot recipients for staff performing critical functions in the event of a pandemic outbreak (if available).
- Identify those functions in your company you consider to be critical to your continued operations, and identify the staff needed to fill those positions. Pre-screen critical staff to ensure their willingness to receive a vaccine if one is available given the side effects that may occur. Involve your human resources staff as well as established mechanisms such as joint health and safety committees early.
- Communicate early and regularly to staff and include recommendations such as maintaining 1 meter/yard of separation during discussions to minimize potential transfer illness during pandemic, so these measures can be practiced and internalized.
- Provide staff and decision-makers with the most up-to-date information available by documenting (Q&A) specific characteristics of the virus, such as the following:
 - Mechanism(s), speed and ease of transmission by which the contagion is spread, and mode(s) of transmission, such as touch, airborne, etc.
 - time the virus remains active on surfaces, such as door handles
 - Incubation period (time to exhibit symptoms) and maximum contagious period.





Develop Plans

- Develop appropriate level response plan and procedures, include the following as a minimum.
 - Initiating conditions for the recognition of an incident or threat, and appropriate response levels
 - Roles and responsibilities of staff, supervisor, staff Doctor and or Nurse.
 - Local Public Health contact(s) and phone numbers
 - Internal contacts for notification
 - List(s) of staff critical to basic functionality of the organization
 - Put in place plans to have staff work from their home (verify capacity for concurrent users).
 - Plan and procedures should include support and assistance if necessary, from Human Resources staff to employee's family.
- Consider the need for a plan to separate the work forces to establish independent locations, and/or preserve a "clean" site.
- Consider the need to send home non-critical staff.
- Consider the need and conditions for more extreme measures such as sequestering staff.

Develop Policies

- Develop/update staff Travel Policy.
- Develop/update Meetings Policy.
- Develop / update Remote Work Policy.
- Develop a Visitors Policy including a "sign-in" process at a minimum that is to be implemented in the event of an employee health incident or threat.
- Post personal protection techniques such as hand washing posters in all washrooms and common areas (kitchens, etc.).





- Develop/update Confidentiality Policy involving your human resources staff covering permission to release names of staff that potentially have been exposed, to allow effective exposure tracking to be completed.

Testing:

- Periodically test and verify your preparedness plans and procedures via a simulation exercise, tabletop exercise or process walk through.

Equipment and Facilities:

- Contract with a company to clean/disinfect computer equipment, common areas etc.
- If appropriate, provide each workstation with a disinfecting agent in a spray bottle, a package of paper towels, and a package of latex/vinyl gloves.
- Purchase and store sufficient quantity of personal protective equipment (masks, gloves and gowns). Some masks deliver better speech clarity than others. Some masks are designed to protect the person wearing the mask; other masks protect exposure of others from the person wearing the mask.
- If on-site cafeteria, stock up on water, beverages, and food, especially items that require heating to eliminate bacteria, such as pizza.
- If appropriate, isolate the building, post signs stating temporary quarantine at all exits, and suspend electronic card access.
- Close non-critical common areas, such as exercise room, or perhaps the cafeteria.

The following is a list of suggested roles, responsibilities and actions in the event of an employee contracting or suspected of contracting an infectious agent during a pandemic.





Response Actions of the Affected Employee

- When an employee has contracted or suspects that they have contracted an infectious agent during a pandemic, the employee is to seek medical attention and advise his/her Supervisor or Line Manager accordingly.

Response Actions of the Employee's Supervisor or Line Manager

- Advise the employee to contact Public Health and the company Doctor/Nurse.
- Line Manager or Supervisor contacts the company Doctor or Occupational Health Nurse to follow up on the employee.
- Implement a process such that all employees/visitors to critical facilities are subject to an appropriate screening tool to aid in identifying whether or not they are a potential risk, (i.e.; have you visited a high risk location in the past day?). Post screening tool(s) at all entrances.
- If appropriate, contract a cleaning service/agency and request that the affected employees' workstation and shared work areas as well as all shared equipment and facilities (including washrooms, kitchen areas and meeting rooms) be disinfected. Assess the need for separation of staff.
- Close non-critical common areas, such as exercise room, or perhaps the cafeteria.
- Assess the need to direct staff to maintain a distance of one meter from each other.
- Assess the need for complete separation of staff including the activation of backup facility(s).
- Assess the need to vacate non-critical staff from the site.
- If appropriate, provide each workstation with a disinfecting agent in a spray bottle, a package of paper towels, and a package of latex/vinyl gloves. Have each crewmember wipe down all equipment and surfaces before and after each shift. Provide each workstation with sanitizing lotion with instructions on use.
- Provide regular communication to all staff of the latest Public Health advisories and recommend adherence to all actions suggested.
- Provide on-site critical operations with personal protective equipment, if staff are able to continue working





- If appropriate, isolate the building, post signs stating temporary quarantine at all exits, and suspend electronic card access.
- Notify all staff on site to leave their full name, employee ID, and after-hours contact number(s), including numbers where they may be potentially relocated, such as parents, family etc. Instruct all employees when they are to be allowed to return to work, such as the following business day unless advised otherwise.
- Have visitors provide their home and site/company as well as an after-hours contact number(s) for follow-up.

Response Actions of Staff Physician or Occupational Health Nurse

- Contact the Health Care Hot Line.
- Liaise with company senior management.
- Advise the exposed employee to contact Public Health and to adhere to the advice given.
- Advise the exposed employee to contact their direct supervisor if they have not already done so.
- Request that the exposed employee keep you informed of their condition.
- Advise the exposed employee not to return to work until directed to do so by Public Health and the staff physician/nurse.
- Support and provide input into employee communications.
- Advise that antibacterial waterless hand cleaner, and antibacterial cleansers and/or wipes should be placed at key communal areas (washrooms, kitchens, and workstations).
- Provide regular communication to all staff on the latest Public Health advisories and recommend adherence to all actions suggested.
- Provide regular communication to all staff on any additional specific requirements or information.





Key Planning Actions by Function

The following table is intended to be used by electricity sector entities to provide an overview of key actions, assigned responsibilities and expected completion date.

Key Actions		Phase	Responsibilities	Due Date
A.	Maintain Awareness and Communicate			
1.	Medical resource should monitor for health threats via official bulletins or web sites.	All		
2.	Provide employees, labor organizations, staff and decision makers with the most up-to-date information available by documenting specific characteristics of the contagion, such as the following:			
a.	Mechanism(s), speed, and ease of transmission by which the contagion is spread, and mode(s) of transmission, such as touch, airborne, etc.	All		
b.	Time the contagion remains active on surfaces, such as door handles.	All		
c.	Incubation period, time to exhibit symptoms, and maximum contagious period.	All		
d.	Expectations of employees, supervisors and managers to help reduce the risk of spreading the disease.	All		
3.	Initiate a business continuity planning process to establish accountabilities, and identify the criticality of operations including mutual inter-dependencies, the loss of which would have a direct and serious detrimental impact on the public. The occurrence of a severe storm or other electric emergency during a pandemic should be considered.	All		
4.	Identify those functions critical to continued operations, and identify the people needed to fill those positions. Pre-screen critical staff to ensure their willingness to receive an antiviral vaccine given the side effects that may occur. Involve human resources staff as well as established mechanisms such as joint health and safety committees early.	Alert		





Key Actions		Phase	Responsibilities	Due Date
5.	Communicate early and regularly to staff, and include recommendations to minimize potential transfer of infectious agents within company facilities, so that these measures can be practiced and internalized.	Alert		
6.	Collaborate with local public health unit on the enumeration of antiviral shot recipients for staff performing critical functions in the event of a pandemic outbreak.	Pre-Pandemic		
B. Develop Plans				
1.	Develop appropriate five phase response plans and procedures including:			
a.	Initiating conditions for the recognition of the threat, and appropriate response levels.	Alert		
b.	Identify critical functions of the organization that must be kept in operation e.g. control rooms, power plant operations, system switching.	Alert		
c.	Identify functions of the organization that can be suspended e.g. meter reading [consider resulting need to estimate bills], training, etc.	Alert		
d.	Define the roles and responsibilities of employees, labor organizations, staff, supervisors, managers, staff medical personnel during a pandemic.	Alert		
e.	Develop an emergency communications plan that includes key contacts, back-ups, medical contacts, communication chains and processes to track and communicate business and employee status.	Alert		
f.	List(s) of staff critical to basic functionality of the organization.	Alert		
g.	Put in place plans to have an increased number of employees work from their home. Ensure I.T. systems infrastructure can support this action.	Alert		





Key Actions		Phase	Responsibilities	Due Date
h.	Plan and procedures should include providing support and assistance from human resources staff to employee families.	Alert		
2.	Consider the need to separate the work force to establish independent locations, and/or preserve a “clean” site.	Alert		
3.	Consider expanding the use of teleconferencing and videoconferencing to limit the frequency of meetings and other types of face-to-face contact.	Alert		
4.	Consider security issues and the limitations law enforcement agencies will face during pandemic.	Alert		
5.	Consider developing joint operational plans with service providers, suppliers and key customers.	Alert		
6.	Evaluate potential financial and budget impacts of interrupted operations, reduced revenues as well as unusual supply, material or personnel costs.	Alert		
7.	Evaluate potential insurance costs for increased medical costs.	Alert		
8.	Consider the need to send home non-critical staff.	Alert		
9.	Consider the need and conditions for more extreme measures such as sequestering on-site critical staff.	Outbreak		
C.	Develop Policies			
1.	Develop/update staff travel policy, including possible provisions for quarantine after returning from an area where an outbreak has occurred. This would apply to work and non-work-related travel.	Alert		
2.	Develop/update meetings policy.	Alert		
3.	Develop a visitor’s policy including a sign-in process that is to be implemented in the event of an employee health incident or threat.	Alert		





Key Actions		Phase	Responsibilities	Due Date
4.	Consult with health authorities to update confidentiality policies to manage staff that potentially has been exposed, to allow effective exposure tracking to be completed.	Alert		
5.	Develop/update telecommuting policy for office staff.	Alert		
6.	Develop/update policies for employee compensation and sick-leave absences unique to a pandemic.	Alert		
7.	Develop/update workforce deployment policies regarding teams and crews working together and the potential need to keep employees separated.	Pre-Pandemic		
D.	Drills and Exercises			
1.	Periodically test and verify preparedness plans and procedures via a simulation exercise, tabletop exercise or process walk through.	Pre-Pandemic		
2.	Test the IT infrastructure to verify its capability to perform under pandemic conditions (more employees working from home, increased teleconferencing and video conferencing).	Pre-Pandemic		
E.	Equipment and Facilities			
1.	Contract with a company that will clean/disinfect computer equipment, common areas, workstations, etc.	Pre-Pandemic		
2.	Provide each workstation with a disinfecting agent in a spray bottle, a package of paper towels, and a package of latex/vinyl gloves.	Pre-Pandemic		





Key Actions		Phase	Responsibilities	Due Date
3.	Determine what personal protective equipment will be effective and consider acquiring sufficient quantities (masks, gloves and gowns). Availability of critical personal protective equipment may approach zero during the onset on a pandemic. Some masks deliver better speech clarity than others. Some masks are designed to protect the person wearing the mask; other masks protect exposure of others from the person wearing the mask.	Pre-Pandemic		
4.	If on-site cafeteria, stock up on water, beverages, and food, especially items that require heating.	Pre-Pandemic		
5.	If appropriate, isolate the building, post signs stating temporary quarantine at all exits, and restrict electronic card access to critical staff.	Disruption		
F.	Response Actions			
1.	By Employees			
a.	When an employee has contracted or suspects that they have contracted a virus or have been exposed to a virus, the employee is to seek medical attention and advise his/her supervisor.	Outbreak		
2.	By the Employer when Outbreak Occurs			
a.	Advise the exposed or infected employees to contact their doctor and advise their supervisor.	Outbreak		
b.	Supervisor contacts the company medical or occupational health nurse to follow up on the employees.	Outbreak		
c.	Implement a process such that all employees/visitors to critical facilities are subject to an appropriate screening questionnaire to aid in identifying whether or not they are a potential risk, (i.e., have you visited a high risk location in the past week?). Post screening questionnaire(s) at all entrances.	Outbreak		





Key Actions		Phase	Responsibilities	Due Date
d.	If appropriate, contract a cleaning service/agency and request the disinfection of the affected employees' workstation and shared work areas as well as all shared equipment and facilities (including washrooms, kitchen areas and meeting rooms). Assess the need for separation of staff.	Outbreak		
e.	Close non-critical common areas, such as exercise room, or even the cafeteria. If the pandemic has resulted in a "lock down" in critical operating functions (control rooms), determine how employees will be accommodated.	Outbreak		
f.	Assess the need to direct staff to maintain an appropriate distance from each other.	Outbreak		
g.	Assess the need for complete separation of staff including the activation of any backup facilities.	Outbreak		
h.	Assess the need to vacate non-critical staff from the site.	Outbreak		
i.	Provide each workstation with a disinfecting agent in a spray bottle, a package of paper towels, and a package of latex/vinyl gloves. Have each shift employee wipe down all equipment and surfaces before and after each shift. Provide each workstation with sanitizing lotion with instructions on use.	Outbreak		
j.	Provide regular communication to all staff of the latest medical advisories and recommend adherence to all actions suggested.	Outbreak		
k.	Provide on-site critical operations staff with personal protective equipment.	Outbreak		
l.	If appropriate, isolate the building, post signs stating temporary quarantine at all exits, and suspend electronic card access.	Outbreak		





Key Actions		Phase	Responsibilities	Due Date
m.	Notify all staff on site to leave their full name, employee ID, and after-hours contact number(s), including numbers where they may be potentially be located, such as parents, other family etc. Instruct all employees when they will be allowed to return to work, i.e. the following business day, not until notified, etc.	Outbreak		
n.	Have visitors provide their home and site/company as well as an after-hours contact number(s) for follow-up.	Outbreak		
3.	By Medical Resource			
a.	Liaise with senior management.	All		
b.	Provide regular communication to all staff on the latest health advisories and recommend adherence to all suggested actions.	All		
c.	Provide regular communication to all staff on any additional pandemic specific requirements or information.	All		
d.	Advise that antibacterial waterless hand cleaner, antibacterial cleansers, and/or wipes will be placed at key communal areas (washrooms, kitchens, workstations).	Pre-Pandemic		
e.	Advise any exposed employee to contact their doctor and to adhere to the advice given.	Outbreak		
f..	Advise any exposed employee to contact their direct supervisor immediately.	Outbreak		
g.	Advise the exposed employee not to return to work until directed to do so by their supervisor and to follow policies in place.	Outbreak		
h.	Request exposed employees to keep supervisors informed of their condition.	Outbreak through recovery		

