

*[Name of Institution]*

**COVID-19 Outbreak in *[Location]***  
**Tabletop Exercise Manual**

*[Date, 2020]*

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EXERCISE

## Introduction

This exercise will focus on existing plans and authority among *[institution]* to respond to the introduction of an outbreak of COVID-19. This exercise focuses on the introduction and sustained transmission of COVID-19 in *[location]*, with an emphasis on *[institution]*, and the threat it poses to the public's health and safety. The time frame for this exercise scenario is March–May 2020.

This exercise will emphasize the role of assets from the *[institution's]* campus in response to the potential consequences of a pandemic incident. **Processes and decision making are more important than minute details.**

A tabletop exercise utilizes a scenario to review and test decision-making processes and existing plans. For this exercise, participants comprise senior leadership. Participants will review the scenario and discuss likely actions in response to injects. During this exercise, participants will need to rely on their own resources to manage the incident. Afterwards, participants will discuss their experience, what they have learned, and suggest improvements to their emergency planning and preparedness.

## Overall Goals and Objectives

The overall goal of the exercise is to identify areas in our emergency response plan that need improvement to address the COVID-19 outbreak scenario.

The objectives include:

1. Assess the validity of the current Emergency Response Plan in the context of an outbreak of COVID-19.
  - a. Clinical response
    - i. Screening, diagnosis, and treatment
  - b. Work-at-home or administrative leave
  - c. Tele-working
  - d. Distance learning (P/VOD course casting)
  - e. Social distancing
  - f. Suspension of classes or closing *[institution]*
  - g. Re-opening the *[institution]*
  - h. Academic crediting
  - i. Supply issues and operations issues (housing, common areas)

2. Assess how the existing emergency response structure at our campus will address the challenges posed by a pandemic COVID-19 event.
  - a. Travel enforcement and quarantine/self-isolation
    - a. How does our plan change once we have the first case of community-based transmission in *[location]*?
  - b. Essential services and personnel
  - c. Crisis communications
3. Assess how our campus will coordinate its response with our campus health service, area hospitals, and state/regional and local public health agencies.
  - a. Congregate care (support for ill students remaining on campus)
4. Identify gaps and issues to be addressed in our campus response plan.
5. Identify the next steps in the planning process.
  - a. Business continuity
6. Review plans to clarify lines of accountability (roles & responsibilities) and communication to enable a timely, well-coordinated, and effective response.
  - a. Continuation of research
  - b. Financial implications to University
  - c. Identify training, communication and resource needs
7. Test samples
  - a. Isolation of diseased individuals
8. Review responder safety and health

## Roles and Responsibilities

This is a facilitated tabletop exercise with the following roles and responsibilities:

Participants respond to the situation presented based upon their knowledge, current plans, and procedures.

Group Facilitator moderates discussion.

## Exercise Modules

This will be a facilitated Tabletop Exercise. The exercise scenario is divided into four distinct response situations, plus a debriefing. Participants will respond to the following scenario modules.

### **Module 1:**

**Introduction of index case to *[institution]* with known exposure**

### **Module 2:**

**Introduction of index case to *[institution]* with community (no known) exposure**

### **Module 3:**

**Outbreak in *[region]***

### **Module 4:**

**Business Continuity and Looking Ahead**

**Exercise Debriefing**

## Exercise Conduct

Each module will be conducted as follows:

- The Group Facilitator will introduce each module.
- In each module, scenario information and events will be provided in the order in which they occur.
- All information will be provided to all participants.
- At the end of each module, the scenario will be suspended for questions and discussion.

## Exercise Assumptions and Instructions

A tabletop exercise is intended to be a safe environment that encourages open and wide-ranging discussion. Differing viewpoints, even professional disagreements, are expected.

- The scenario is plausible, and events occur as they are presented.
- Respond based on your knowledge of current plans and capabilities. You may not use non-existent assets.
- There is no pre-determined solution to this exercise. Make your best decision based on the circumstances presented.
- Decisions are not precedent setting and do not necessarily reflect the *[institution's]* position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Assume cooperation and support from other responders and agencies. Assume that state/regional and federal responders are initiating their plans, procedures, and protocols while you are concentrating on the *[institution's]* response. Draw upon your own experience and knowledge of how local, state/region, and federal agencies work together in any emergency response situation.
- The presented events, information, written material, and resources serve as the basis for discussion.
- The response process and decision-making are more important than details.

## Additional Resources

During the exercise, you may need some specific information to assist you in making a decision. As you participate, draw on your experience and knowledge of how Federal, state/regional, and local agencies work together in an emergency response situation.

## Exercise Schedule

1:00	Welcome and Introduction
1:05	Narrative
1:10	Module 1: Introduction with Known Exposure
1:30	Module 2: Introduction with Unknown Exposure
2:00	Module 3: Suspension of Classes
2:30	Module 4: Business Continuity and Looking Ahead
3:00	Exercise Debriefing
3:25	Review and Conclusion
3:30	Adjourn

EXERCISE



## Background and Timeline

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- Dec 2019**      **China confirmed dozens of cases of pneumonia, origin unknown.**
- Jan 2020**
- Jan 11**      **Wuhan, China, reported first death. Victim was a customer of the open-air market believed to be the origin of the illness.**
- Jan 16-21**    **China confirmed human-to-human transmission as first cases outside of China reported in Japan, Thailand, South Korea, and the United States.**
- Jan 23-25**    **1<sup>st</sup> case diagnosed in US. 56 million people affected by travel suspension in Wuhan and 4 other cities in Hubei province. At least 17 people dead, and more than 570 infected.**
- Jan 30**      **WHO declares Public Health Emergency of International Concern.**
- Feb 2020**
- Feb 2-5**      **First death outside China reported in the Philippines; victim a Wuhan resident.**
- CDC submitted Emergency Use Authorization package to the FDA in order to approve (RT)-PCR diagnostic panel for testing US cases of the virus.**
- Japanese cruise ship reported the highest number of positive tests outside of China, over 3,600 passengers quarantined onboard. WHO reaffirmed there was "no known effective treatment" for the coronavirus.**
- CDC releases and then recalls diagnostic tests to state public health labs**
- Feb 9**      **Death toll surpassed the 2002-2003 SARS epidemic at 811 recorded deaths.**
- Feb 11**      **WHO announced disease caused by novel coronavirus would be called "COVID-19" as the death toll in China topped 1,000.**
- Feb 19-23**    **South Korea, Iran, and Italy report growing number of cases and**

**deaths from coronavirus.**

- Feb 24** South Korea reports 833 confirmed cases and seven deaths. 35 confirmed cases reported in the US, no deaths. Iran reports 61 cases of coronavirus and 12 deaths. Cases in seven other middle eastern countries and Canada are traced back to Iran.
- Feb 25** China's reported cases plateaued as Iran's official total reached 95 cases with 15 deaths. South Korea's confirmed cases rose to 977 while Italy's reached 229.
- Feb 26** 1<sup>st</sup> case in US with no known exposure. Latin America reports its first coronavirus case; the case is traced back to Italy.
- Mar 2020** **Mar 1** Hubei province case numbers have begun to rise again after a period of decline.
- Mar 2 -3** More countries reporting new cases; virus continues to spread throughout the world. Countries include those in the European, Asian, African, and North American continents.
- Cases in Iran, Republic of Korea, Italy, and US continue to rise.
- Mar 4** Global supply of personal protective equipment (PPE) is running Low, leaving many healthcare workers ill-equipped to care for patients.
- Number of new cases in China remain steady, but relatively low.
- Mar 7-8** Global number of reported cases has exceeded 100,000 and over 100 countries have laboratory confirmed cases of COVID-19.
- Mar 9-11** WHO director classified outbreak as pandemic.
- Number of confirmed cases in US reaches 696; deaths at 25
- [Date]* First COVID-19 case in *[location]*.  
Worldwide: *[XX cases, YY deaths]*  
*[Country: X cases, Y deaths, Z states/regions]*

## **MODULE 1: Introduction of COVID-19 with known exposure**

*Friday, March 6, 2020*

1. Student traveling back from Europe develops symptoms compatible with COVID-19
  - Arrives at the health clinic without calling first.
  - In consultation with *[state/regional health department]*, testing conducted for COVID-19

*Monday, March 9, 2020*

2. Student tests positive for COVID-19
  - *[State/regional health department]* is able to conduct contact tracing and quarantine people who have been in close contact.
  - Student did not adhere and attended a Pre-Pharmacy Club meeting and potentially exposed up to 10 people (including advisors) in a social atmosphere.
3. People with casual (and/or close) contact to one of the cases want to be tested/screened for COVID-19.
4. Student has two roommates. They all live off-campus.
  - Word has traveled fast over social media about the “students with coronavirus.”
  - Students are fearful of catching the virus.



## Discussion

1. Do we need to find out if and how long the patient was in the *[health clinic]* waiting room?  
Do we have criteria dictating who was exposed?
2. What is communicated to the campus community?
  - What happens if students don't want to come to class?
  - What happens if staff don't want to come to work?
3. We now have cases of COVID-19 in *[region]*. Do we change any of our policies regarding *[institution]*-sponsored travel to other endemic areas?
  - Do we make any changes to screening questions at our clinics?
  - Are student trainees still allowed to see patients?
4. Given that clinicians can now order COVID-19 tests, what criteria do we use for testing?
  - Do we test anybody who wants to be tested?
  - Are the sensitivity and specificity of the diagnostic tests known?
  - Does the positive predictive value of the diagnostic test change depending on the clinical course of disease?
  - Can the diagnostic test be used as a screening test among asymptomatic people?
5. Assume one of the cases has two roommates and they live off-campus. Do we have any recommendations for the roommates? (They have been exposed but are not showing symptoms.)
  - Would our recommendations change if the case and roommates lived on campus?
6. What are the recommendations for the people who attended the Pre-Pharmacy Club meeting?
  - Is the student/case disciplined for not adhering to the isolation policy?
  - Would discipline/consequences be different if it was an employee instead?

## **MODULE 2: Introduction of COVID-19 from community (no known exposure)**

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*Prior to Monday, March 16*

1. A series of positive cases have been identified in *[region]*; origins are all traceable to other cases thus far. Only the most severe cases are being tested, so the numbers are likely higher than reported.

*Monday, March 16*

2. A 58-year-old male who works at *[department within institution]* presents to the Health Clinic without notification, experiencing fever, cough, and shortness of breath. He denies any out-of-state travel.
  - He tests positive for COVID-19. Isolation is advised.

*Wednesday, March 18*

3. 48 hours later his spouse, who works at *[a sister campus]*, comes down with similar symptoms, she is tested by *[the state/regional health department]*, and she is positive for COVID-19.
  - She informs clinic staff that she continued commuting to her office after her husband's return home.
  - What should be done with this information?



## Discussion

1. Did you activate your Emergency Operations Center (EOC)?
2. What needs to be communicated to the students and employees and the general public?
  - Who will craft the appropriate press release?
3. What are the policy issues for faculty and staff who want to work at home, citing fears of being exposed to an infectious person during their incubation period?
  - What if the network (via VPN) is too slow because of overuse?
  - A relatively large number of faculty and staff have reported software/system delays in response times while working online. Some are experiencing other computer issues as well, and there is a delay in IT getting back with them. What policies govern employees who work at home but do not have a functioning computer?
4. Are any changes warranted to recommendations or policies for Spring Break?
5. What are the decision points for suspending classes or closing the *[institution]*?
  - What are the triggers? Number of deaths and/or cases? Case-fatality rate?
  - Are the triggers for cancelling classes different from those to ask faculty to work from home?
6. Does the Incident Command Team in the EOC have the authority to acquire more resources (medical supplies, security, personnel, etc.)?

### **MODULE 3: Outbreak of COVID-19 in [Region]**

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March 22-April 4

1. Sunday, March 22: 5 cases of COVID-19 in [region], 4 in County A, 1 in County B.
2. During the week of March 23-28, 10 additional cases are diagnosed representing 5 different clusters of disease. Several of them are residents of County C.
3. Tuesday, March 24, the first death from COVID-19 occurs in [region].
4. During the week of March 29-April 4, 20 additional cases are diagnosed representing 10 new clusters of disease and reside in seven different counties in the state.
5. Wednesday, April 1, three additional people (known cases) have died from COVID-19.
  - Based on the literature, among hospitalized cases of COVID-19:
    - a. 2.3%-6.1% of cases need mechanical ventilation<sup>1</sup>
    - b. 0.5% need extracorporeal membrane oxygenation (ECMO)<sup>1</sup>
    - c. 5% had an ICU
    - d. Median LOS = 12 days
    - e. 0.8 % needed continuous renal-replacement therapy

## Discussion

1. If you **didn't** cancel classes or close the *[institution]* in Module 2, do you do so now?
  - To what extent will you use capabilities for video-streaming lectures so that students don't miss out on course work? What are the key factors in making decisions related to this area?
  - How will you address missed work for courses requiring in-class participation (*i.e.*, courses that aren't amenable to watching video-streamed lectures?)
  - Is there a trigger for vacating student housing, such as the dorms at the university?
2. Will *[institution]*-sponsored gatherings/events be canceled, such as student socials? Who makes this decision? What are the triggers? (See Table of events at end of exercise)
3. *[Head Coach and President]* of *[institution]* solicit your opinion about canceling *[major athletic event]*. What is your advice?
4. Are any other athletic events affected?
  - Will any of our gymnasts (or other athletes) be going to the Olympics?
5. What business continuity planning clause might affect vendors who don't deliver?
6. Do we know how many cases of COVID-19 would exceed the hospital and campus clinic capacity and resources (such as available ventilators?) (Does the hospital typically run pretty close to capacity?) What approaches to managing surge capacity will be used?
7. Are you concerned about the lack of food and medication supplies being delivered to the campus? If yes, what plans do you have to secure food and/or medical supplies?
8. What mechanisms are in place to address mental health issues for students, faculty, and staff? (Potential issues include death/hospitalization of loved-ones, stress related to postponing graduation, missed work, etc.)
  - Will students already seeking care be able to keep their regular appointments?
9. Is critical research allowed to continue?
  - Are there any threats to caring for the research animals?
  - Is it safe for our researchers to see participants who are coughing? Should they be screened first?



## MODULE 4: Business Continuity and Looking Ahead

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April 19 to May 12, 2020

1. Every *[state/region]* in the *[country]* has had multiple cases of and deaths from COVID-19.
2. In *[state/region]*, the epidemic curve has peaked and there has been the first observed decrease in the number of weekly cases.

### Discussion

1. How many consecutive weeks (or incubation periods) should there be a decrease in cases before people return to campus?
  - What are the triggers to reopen classes?
2. Who is communicating information about closure length to the students and employees?
3. How does the *[institution's]* administration identify those who have recovered from COVID-19? Medical clearance to return to campus? If so, who monitors?
4. What policy covers those students and employees who refuse to return to campus until they feel it is safe to return? What resources are there to make the return comfortable for students and employees?
5. What are the issues regarding tuition reimbursements, credits, etc.?
6. Will there be any changes with summer internships and summer classes?
7. Will summer events be delayed or canceled?
8. How are international students or students receiving VA benefits affected?

<b>Major Events [to be customized]</b>		
<b>Event</b>	<b>Campus</b>	<b>Date</b>
Career Fair		March 2020
College of Medicine Match Day		March 2020
Research Symposium		March 2020
Teacher Job Fair		March 2020
Family Weekend		April 2020
Medieval Fair		April 2020
Community Fun Run/Walk		April 2020
President's Dinner		April 2020
Research Week		April 2020
Outdoor Community Event		April 2020
Spring Football Game		April 2020
University Volunteer Event		April 2020
Final Spring Exams		April 2020
Campus Awards		April 2020
Marathon/5K		April 2020
Pride Festival		May 2020
Graduation Convocations		May 2020
Graduation Commencement		May 2020
Start of PA, DDS and OT/PT		June 2020
Summer Classes		June - July 2020
Collegiate Camp		July 2020
Fall Classes Begin		August 2020
Education Conferences		September 2020
Community 5K/Marathon		October 2020
Comprehensive Exams		
Orientation		

## Debriefing Questions

1. Identify the three most important activities accomplished during this tabletop exercise.
2. What are the three most important gaps identified during this exercise?
3. What are the three most important lessons learned from participating in this exercise?
4. Identify three things that could help improve this exercise.

EXERCISE

## References

1. Guan WJ, Ni ZY, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med.* 2020.
2. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>
3. <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
4. <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-ihe-response.html>

EXERCISE