

# GUIDE TO BUSINESS CONTINUITY AND RECOVERY PLANNING

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LABORATORIES AND RESEARCH FACILITIES

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## INTRODUCTION

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Although infrequent, emergencies of all types and severity occur on campus and can have a devastating impact on you, your work, and your colleagues. Consider the following situations:

- A fire breaks out in your lab or an adjacent lab, forcing you to evacuate the building...
- A sprinkler head malfunctions and floods your lab...
- A blizzard paralyzes campus, closing all roads for three days...
- A pandemic virus has sickened or indirectly impacted 50% of your staff...

How would you respond to these events? What would you do to prevent a major disruption in research or the loss of valuable work? What would you do to preserve equipment, specimens, and samples?

Knowing what to do and having a plan will help limit disruptions and reduce unacceptable losses in your operations. Research laboratories are vital to the mission of UW, its funding sponsors, and its many potential benefactors, present and future. Modern laboratories are extremely complex and depend on specialized equipment, supplies, environments, information technology systems, support services, and, of course, highly skilled people. Breakdowns or disruptions in any one of these elements can cause serious harm to ongoing research. Prolonged failures in some of these areas (i.e., loss of electrical power) may eventually lead to irreparable damage to equipment and the potential loss of unique collections of samples and specimens.

This guide has been developed to help laboratory managers, principal investigators, and others, develop a business continuity plan to help ensure that vital research operations can continue following a disaster or major disruption.

### WHAT IS A BUSINESS CONTINUITY PLAN

A Business Continuity Plan (BCP) is a collection of resources, actions, procedures, and information that is developed, tested, and held in readiness for use in the event of a major disruption of operations. This planning helps prepare UW departments and organizations to maintain essential functions after a disaster or other major disruption. Your department may have a broader [Business, Academic and Research Continuity \(BARC\) Plan](#) through the [Husky Ready](#) system with some of these details already established. This business continuity plan is meant to supplement and support that system. In the event of a major disaster or other disruption, having a business continuity plan will minimize the impact to your laboratory, shop, or facility and help you return to normal operations as quickly as possible.

A business continuity plan is different from an emergency plan. An emergency plan tells you what to do immediately before or during an emergency, like what to do if you see a fire, or what to do during a blizzard. A business continuity plan helps you minimize the impact on our business regardless of the incident and helps you return to normal operations as soon as possible.

While your laboratory may not be considered a “business” in the traditional sense, the UW recognizes and supports continuity planning efforts and requirements including *all* operations in the university’s academic, teaching and research portfolio.

## HOW DOES THIS PLAN DIFFER OR SYNC WITH THE UW’S BARC PROGRAM?

Beginning in 2008, the UW established and continues to support an institution-wide continuity planning effort. Known as BARC, the UW’s [Business, Academic & Research Continuity program](#), was developed to ensure university-wide planning consistency and compliance with Administrative Policy Statement ([APS](#)) 13.2 “[Business Continuity Management](#).” APS 13.2 mandates that all University administrative and academic units have in place a plan that includes procedures for operational continuity to ensure the University is able to provide critical services. These plans should include, but are not limited to the following four basic elements:

1. A prioritized recovery check list of critical resources and infrastructure needed to support the unit’s primary mission and function.
2. An alternative staffing plan to allow for operations when greater than 25% of the unit’s staffing is unable to work for more than 72 hours.
3. An alternative location designated in the event the primary workspace is not available.
4. A plan to promote personal preparedness for staff and faculty.

The UW’s BARC program provides technical guidance to departments and units, including granting online access to the UW’s (free) online continuity planning tool, [HuskyReady](#). HuskyReady is the *recommended* tool to be used by UW Colleges, Departments, Units and Centers. This guide for laboratories and research facilities should be considered a foundation plan that, while it may be developed independently, should be part of, or be referenced as, part of a full BARC plan completed by the parent department or college. The contents of this guide contain all of the same planning elements of the BARC plans. They can either be transitioned to a full HuskyReady plan, or, by reference, be included as an attachment to a larger HuskyReady plan.

## HOW TO USE THIS GUIDE

There are three main sections of this guide. The first is the checklist, found on the next page. It will help you ensure you have covered all the key tasks for building a continuity plan. If you have laboratories in multiple locations, we recommend creating a separate plan for each location and maintaining a checklist for each one.

The next section will help guide you in the creation of your business continuity plan.

As you develop your continuity plan, you will inevitably identify things that are needed to help you be better prepared. It is important to capture these suggestions during the planning process.

The final section is about how to test your continuity plan and keep it updated.

If you have any questions about this guide, or if you need additional assistance in your business continuity planning, please contact Laboratory Safety at [labcheck@uw.edu](mailto:labcheck@uw.edu) or UWEM at [disaster@uw.edu](mailto:disaster@uw.edu)

## GETTING STARTED

Developing a business continuity plan may seem like an overwhelming task, but you probably already have much of the required information and process. This guide will help walk you through the planning steps in a logical order.

- **Don't do this alone.** Develop a planning team to help bring all the pieces together. Include your principal investigator, chemical hygiene officer, lab manager, core facilities manager, animal care staff and other essential staff.
- **Schedule regular meetings** with the planning team. Add additional meetings as needed.
- **Follow this guide** and complete the worksheets.
- **Review existing plans** such as your department's BARC plan or building's Emergency Plan. They may provide helpful information for developing your business continuity plan.

# BUSINESS CONTINUITY PLANNING CHECKLIST

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**PRINCIPAL INVESTIGATOR / RESPONSIBLE PARTY:**

**DEPARTMENT:**

**ROOM NUMBERS, BUILDING, CAMPUS:**

- IDENTIFY KEY EMERGENCY CONTACTS
- CREATE KEY EMERGENCY CONTACTS LIST AND GIVE A COPY TO YOUR TEAM
- CREATE CONTACT LIST FOR OTHER IMPORTANT CONTACTS
- DETERMINE ESSENTIAL FUNCTIONS
- CONDUCT A BUSINESS IMPACT ANALYSIS FOR EACH ESSENTIAL FUNCTION
- PRIORITIZE YOUR ESSENTIAL FUNCTIONS
- COMPLETE A RECOVERY PLAN FOR EACH ESSENTIAL FUNCTION
- COMPLETE A SPECIALIZED EQUIPMENT LIST
- COMPLETE A TEMPERATURE-SENSITIVE EQUIPMENT LIST
- COMPLETE A SPECIALIZED SUPPLIES LIST
- COMPLETE AN ESSENTIAL VENDORS LIST
- CREATE A PLAN TO PROTECT UNIQUE SPECIMENS AND MATERIALS
- DOCUMENT INFORMATION ABOUT THE CARE AND FEEDING OF RESEARCH ANIMALS
- HAVE ADEQUATE SUPPLY OF FOOD FOR ANIMAL RESEARCH
- DETERMINE BACKUP POWER OPTIONS FOR YOUR LOCATION
- VERIFY THAT CRITICAL EQUIPMENT IS CONNECTED TO EMERGENCY POWER SUPPLY
- CREATE A PLAN FOR MANAGING ESSENTIAL EQUIPMENT IN THE EVENT OF LOSS OF POWER
- DETAIL HOW THE LOSS OF BASIC UTILITIES WOULD IMPACT OPERATIONS
- ENSURE THAT ALL NECESSARY PERSONNEL HAVE THE TOOLS AND INFORMATION NEEDED TO CARRY OUT WORK REMOTELY

- ❑ MAINTAIN A LIST OF VITAL DOCUMENTS, FILES AND FOLDERS AND INCLUDE BACKUP PLANS
- ❑ ENSURE THAT OTHER VITAL DOCUMENTS NOT IN ELECTRONIC FORM ARE BACKED UP IN SOME FORMAT
- ❑ DOCUMENT PEERS, COLLEAGUES, OR COLLABORATORS WHO COULD BE A SUPPORT NETWORK
- ❑ IDENTIFY MINIMUM ALTERNATE SITE REQUIREMENTS NEEDED TO RESUME OPERATIONS IF RELOCATION IS REQUIRED
- ❑ MAKE A LIST OF POSSIBLE EMERGENCY RELOCATION SITES
- ❑ CREATE AN EMERGENCY COMMUNICATION PLAN / “CALL TREE” AND GIVE A COPY TO YOUR TEAM
- ❑ TEST YOUR EMERGENCY COMMUNICATION PLAN ANNUALLY
- ❑ INFORM ALL EMPLOYEES ABOUT THE EMERGENCY AND BUSINESS CONTINUITY PLANS
- ❑ TEST / EXERCISE YOUR PLAN
- ❑ ADDRESS IDEAS AND SUGGESTIONS CAPTURED DURING PLANNING AND REVISE PLAN
- ❑ REVIEW PLAN ANNUALLY



## BUILDING YOUR PLAN

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### IDENTIFY KEY EMERGENCY CONTACTS

Knowing who to contact in an emergency is critical. Start your business continuity planning by identifying the key emergency contacts for your site. Keep a written copy with you at all times and share it with others in your lab. If you are like most people, you probably keep all of your contacts in your cell phone. But what if you lost your phone? Do you have a backup copy of your contacts? How long would it take to reconstruct your contacts list? What would you do if you lost access to internet, intranet, or UW Servers? A little pre-planning now can save valuable time later. *Tip: Consider creating and sharing a Google doc with critical contact information.*

General categories of emergency personnel include positions necessary to support or maintain:

- Human health, welfare and/or safety
- Information technology services or security
- Building or property security, safety, and integrity
- Research animals, specimens, or equipment
- Critical infrastructure (e.g., power, water, heat, roads, etc.)
- Critical business, contractual, or legal obligations including employee payroll

### OTHER IMPORTANT CONTACTS

In addition to your emergency contacts, you will also want to maintain updated lists of all employees, students, postdocs, essential vendors, and funding organizations/program officers. Include after-hours contact information, if available. Keep copies readily accessible (i.e., cloud file storage) in multiple locations. Consider e-mailing the lists to yourself and saving them in a special folder so you can access them from any location. Regularly review and update lists as well as laboratory information and facility contacts cards.

### TASKS

- Complete **Key Emergency Contacts** List. Give a copy to everyone on your team.
- Create contact lists for important contacts (e.g., employees, students, postdocs, funding sponsors, vendors, etc.)

### DETERMINING ESSENTIAL FUNCTIONS

Essential functions are those services, programs, or activities that are necessary to the ongoing business of the University and would directly affect the success of your department or laboratory if they were to stop for an extended period of time. The success of your department and the support you provide to the University rely on these functions; stopping them for an extended period of time would cause harm to your department and the university.

Your essential functions will serve as your guide for how to restart your operations following a disaster or major disruption. They help answer the question “What is the minimum level of service or activity my department or laboratory must offer to still be considered operational?”

By identifying and prioritizing your essential functions, you can determine which personnel, facilities, equipment, and materials are absolutely necessary to keep your department or laboratory functioning following a disaster or major disruption. Prioritizing your functions will also help you determine the recovery time objective (RTO) – the length of time the function can be suspended without causing significant disruption to your operations.

Typical essential functions for research laboratories include, but are not limited to:

- Conduct research
- Order supplies
- Manage staff

In general you should be able to organize your mission into three to five essential functions; more if you are a highly complex department or laboratory.

## CONDUCTING A BUSINESS IMPACT ANALYSIS

A Business Impact Analysis (BIA) is completed for each essential function to help assess and document potential impacts and negative consequences of a disaster or major disruption on the function. Conducting a BIA also helps establish recovery priorities by looking at dependencies, peak periods, harmful consequences, and financial risks.

## PRIORITIZING YOUR ESSENTIAL FUNCTIONS

While everything you do each day may seem essential, in reality some functions and activities are more essential than others. Some activities can be suspended for several weeks, while others cannot be stopped for more than one day. Knowing the priorities of your functions will help you establish a recovery plan that focuses on the functions that are the most important.

The following chart is general guidance to help you prioritize your functions.

PRIORITY RATING	IMPORTANCE	RECOVERY TIME
CRITICAL	Function directly impacts the life, health, safety, or security of the UW community and stopping would have significant consequences.	< 4 HOURS
HIGH	Function must continue at normal or increased level. Pausing for more than 24 hours may cause significant consequences or serious harm to business operations, upstream and downstream dependent organizations or units, revenue and finances, reputation, or other core mission services.	< 24 HOURS
MEDIUM	Function must be continued if at all possible, perhaps in reduced mode. Stopping for more than one week may cause major disruption to business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.	< 1 WEEK
LOW	Function could be suspended for up to one month without causing significant disruption to business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.	< 1 MONTH
DEFERRABLE	Function may pause and resume when conditions permit. Deferring this function for more than one month may cause slight disruption to business operations, upstream and downstream dependent organizations or units, revenue and finances, or other core mission services.	> 1 MONTH

## TASK

- Complete an **Essential Function** and **Business Impact Analysis** for each function you have identified.

## DEVELOPING RECOVERY STRATEGIES AND TASKS

When a disaster or major disruption happens, every moment counts. You have identified and prioritized your essential functions, have identified the required resources, and possibly alternate locations. The next step is to outline the actions to take after a disaster or major disruption to maintain or restore each function. This will involve developing recovery strategies and recovery tasks.

Recovery strategies are the backup plans that help you stay in business after a disaster or major disruption. They indicate what the practice or department needs to do to recover and return to normal operations. Example: If your essential function is Provide Clinical Services, then the recovery strategy is “To continue providing clinical services”.

Each recovery strategy is followed by recovery tasks. Tasks are specific actions or activities taken to accomplish the strategy. Recovery tasks serve as checklists that guide your recovery actions and are organized by required resources – People, Places, and Things. Recovery tasks can help answer the basic question “What if?”

- What if 50% of your staff was out sick with the flu for several weeks?
- What if your building was destroyed by fire? Where would you go?
- What if your specialized equipment was damaged or destroyed?
- What if you lost access to the Internet?

When creating your recovery tasks be sure to include enough details to make them useful. If they are too vague they won't be helpful. Include important steps to take, required resources, and key contacts needed to complete the task. An effective recovery strategy and recovery tasks should be easily understood by all of your recovery team.

### TASK

- Complete a **Recovery Plan** for each function you have identified.

## SPECIALIZED EQUIPMENT

Many labs rely on highly specialized equipment. Some of these are one-of-a-kind while others are fairly common but very expensive. Consider the most important equipment in your lab. How would you continue your research if it were damaged or destroyed? How long would it take to replace? What would you do while waiting for the new equipment to be installed? Having a detailed inventory of your essential equipment and a backup plan can help minimize the effects of a disaster or other emergency. *Tip: Label each piece of equipment with your name and relevant emergency contact information.*

## BUSINESS CONTINUITY CONSIDERATIONS

- Maintain a list of specialized equipment that your laboratory relies on. Include information such as make, model, serial number, and where it was purchased.

- For equipment purchased through e-Procurement, determine if the information is still maintained in their system. Contact your department office to request a report of your recent purchases.
- Determine if your building has alternate backup emergency power such as a generator. *See Loss of Power below for additional information.*
- Determine if critical equipment is connected to backup or emergency power.
- For highly customized equipment or experimental apparatus, keep duplicate copies of drawings, diagrams, plans, or specifications in a secure off-site location. Scan information if possible and store off site or on an encrypted USB storage device.
- Identify equipment with special utility requirements, such as process chilled water, high voltage, three phase power, etc..
- Ensure that equipment warranties and extended service and maintenance contracts are in force and kept up to date.
- Establish or adopt industry recommendations for routine calibration, testing, and preventive maintenance, and ensure they get done.
- Keep copies of the inventory readily accessible in multiple locations.

## **TASK**

- Complete a **Specialized Equipment List** for your facility.

## **TEMPERATURE-SENSITIVE EQUIPMENT**

Most laboratories today rely on an array of temperature-sensitive equipment. Consider what would happen if this equipment failed. How would it impact your research? Having a detailed inventory of temperature-sensitive equipment and a backup plan can help minimize the effects of a disaster or other emergency.

## **BUSINESS CONTINUITY CONSIDERATIONS**

- Maintain a list of all of the equipment containing temperature-sensitive specimens (e.g., refrigerators, freezers, incubators, etc.).
- Be aware of the emergency power systems for your locations and what equipment is connected to it. *See Loss of Power below for additional information.*
- Ensure that temperature-monitoring alarms, if equipped, are working. Consider contracting for remote monitoring through an outside vendor if necessary.
- Label each piece of equipment with your name and relevant emergency contact information.
- Know the maximum length of time the equipment can be without power but still maintain acceptable temperature.

- Know the environmental temperature tolerance of the equipment (e.g., what ambient temperature will cause a freezer to fail).
- Maintain a list of all of your temperature-sensitive specimens in each location and the approximate time limit before the specimens will be adversely affected by a temperature change. This will help you to prioritize the relocation of specimens if necessary.
- Identify a backup location, either within your lab or in a neighboring lab that you could use in the event of an equipment malfunction.

## TASK

- Complete a **Temperature-Sensitive List** for your facility.

## SPECIALIZED SUPPLIES AND ESSENTIAL VENDORS

Laboratories require highly specialized equipment, chemicals, samples, and other materials, as well as specialized vendors. Consider how you would operate if your routine supply chains were disrupted. How long can you manage before placing your next order? What would you do if your normal suppliers were no longer available?

## BUSINESS CONTINUITY CONSIDERATIONS

- Identify specialized supplies that you rely on. This include supplies that are difficult to obtain, require special authorization or handling, or are only available from limited vendors.
- Identify key vendors of essential equipment, supplies, and service contracts. Contact your department office to request a report of your recent purchases.
- Develop contact lists including routine and emergency after-hours contact information.
- Identify an alternate backup vendor for essential must-have items.
- Where feasible, increase standing inventories of crucial supplies and reagents, especially those that typically rely on just-in-time ordering.
- Review and update all contact lists on a regular basis.
- Keep copies of contact lists readily accessible in multiple locations. Share with others in your lab.
- Have a conversation with your suppliers about their business continuity plan. Propose the same scenario and ask how they plan to maintain deliveries of supplies following a disaster or other interruption to their business.

## TASK

- Complete a **Specialized Supplies List** for your facility.
- Complete an **Essential Vendors List** for your facility.

## PROTECT UNIQUE SPECIMENS AND MATERIALS

Live, fixed, and frozen samples/specimens are extremely important and invaluable assets of many laboratories. Researchers collecting, developing, generating, or otherwise in possession of such materials have a high level of responsibility for their protection and future availability.

### BUSINESS CONTINUITY CONSIDERATIONS

- Maintain accurate inventory records for unique specimens and materials.
- Properly maintain and service all equipment and devices that secure these materials.
- Develop redundant storage for irreplaceable specimens (e.g., animals, plants, cell lines, DNA, etc.), if possible, preferably both on and off-site to maximize protection. Considering splitting the storage of vital specimens —separating the specimens, and storing separate collections in different locations.
- Develop emergency procedures that outline what to do with your specimens and how to shut down your workstation and laboratory in the event of a disaster or major disruption.

## CONSIDERATIONS FOR ANIMAL RESEARCH

Research animals require special care that includes specialized environments, equipment, supplies, food and water, and, of course, qualified staff. Any of these could be disrupted by a disaster or other emergency. What if you or your regular staff were unable to reach your lab for several days? What if a blizzard closed the roads and deliveries were delayed? Do you have plans in place that will ensure the proper care of your animals?

### BUSINESS CONTINUITY CONSIDERATIONS

- Maintain detailed information about the care and feeding of all laboratory animals in the event that usual caregivers are unavailable.
- Keep cage cards, special instructions, and other vital information updated and easily accessible.
- Keep a duplicate set of instructions in a separate location from your lab.
- Ensure that adequate supply of special food is available and easily identifiable.
- Maintain close contact with applicable husbandry and vet staff, and discuss and document any emergency care support they are expected to provide.

## LOSS OF POWER

One of the biggest fears of any laboratory manager or research scientist is the thought of a power outage. A power outage creates the potential for loss of valuable specimens and years of research. At some point during your research you could lose power in your laboratory due to extreme weather, rolling blackouts, or equipment malfunctions. You can lessen the effects of a power outage, and your chances of losing your hard work, by being prepared and following some easy procedures.

## BUSINESS CONTINUITY CONSIDERATIONS

- Be familiar with the emergency backup power system(s) for your area, including what is covered and how long the backup power can be relied upon. Contact your facility manager or superintendent if unsure about backup power for your location.
- Verify that freezers, refrigerators, incubators, and other temperature-sensitive equipment holding critical materials are connected to an emergency power supply, if available for your lab. Consult with your facility manager or superintendent before connecting equipment to emergency power outlets to avoid overloading circuits.
- Install uninterruptible power supply (UPS) for equipment highly sensitive to slight power delays or fluctuations.
- Know how long freezers, refrigerators, incubators, and other temperature-sensitive equipment NOT connected to emergency power supply will maintain proper temperatures in the event of a power failure.
- Maintain a list of essential equipment that may be damaged by a power surge when the power is restored.
- Maintain a list of essential equipment that may have an automatic “ON” switch and may come on by itself when power is restored, even if no one is around. Consider unplugging or turning off this equipment during the outage to avoid harmful effects when the power returns.
- Identify equipment that may need to be reset or restarted when the power is restored. (e.g., centrifuges, computers, fume hoods, etc.).
- Maintain a list of all of your temperature-sensitive specimens in each location and the approximate time limit before the specimens will be adversely affected by a temperature change. This will help you to prioritize the relocation of specimens if necessary.
- Ensure that seals to freezers are intact. Most freezers will keep their temperature steady or below freezing for up to 10 hours if kept closed and properly sealed.
- Identify other freezers in your lab or neighboring labs that may have their own backup power or run on CO<sub>2</sub> or liquid nitrogen which may be unaffected by a power outage, and discuss the possibility of sharing freezer space with them if necessary.
- Store or know where you can easily obtain dry ice and coolers in the event of a prolonged outage.

## LOSS OF BASIC UTILITIES

Power is not the only utility that may be affected by a disaster or equipment malfunction. Consider the impact of a prolonged failure of water systems, heating and cooling, or specialized ventilation systems. Some of these failures will have limited impact on a laboratory, while others may be catastrophic. The time of year will also be a factor. If the outage is expected to be short, it may be best to suspend operations until the problem is resolved. Longer outages have the potential to cause significant problems for many research laboratories.



## TASK

- Describe how the loss of each of the following basic utilities would impact your operations. Include contingency plans that are already in place. Example: Municipal water
  - Lab stores 10 gallons of distilled water in case of emergencies.

Basic Utilities:

- Electricity
- Water (municipal)
- Heating
- Air conditioning
- Humidity controls
- Ventilation systems

## REMOTE ACCESS TO INFORMATION TECHNOLOGY

Prepare to be able to carry out meetings remotely, using approaches similar for remote teaching of classes. If you are unsure about whether you have access to such tools, it is wise to test them in advance. All students, post-docs, staff, and faculty involved in research projects should ensure that they have access to information they need to carry out work remotely. This might include, for example, access to literature, access to existing datasets and research-related files, and access to meeting software (such as [Zoom](#), Skype).

Examples of the types of research work that can be done remotely are data analysis, literature reviews, writing proposals, reviews, or research papers, writing the background sections of theses, computational work, meetings, discussions, etc.

## TASK

- Ensure that all necessary personnel have the tools and information needed to carry out work remotely.

## ACCESS TO VITAL DOCUMENTS ON COMPUTERS

It is difficult to imagine how we could possibly work without our computers and the Internet. Whether it's a stand-alone desktop computer, laptop, tablet, high-capacity computing, or even a smart phone, we depend on computers every day. Unfortunately computers and systems can fail or get stolen. What would you do if the internet were to go down? How long could you manage? What if your hardware or software crashed or was destroyed? Do you have secure automatic backup?

## BUSINESS CONTINUITY CONSIDERATIONS

- Laptops should be routinely backed up, to either a network server or an encrypted USB storage device.
- Maintain a list of vital documents, files, and folders and include how they are backed up.

- In the event of a network problem in which you cannot access your software or files, contact your department IT specialist or the UW IT for assistance. They should be able to help determine the nature of the problem and help you decide whether or not to retrieve your vital records from the backup.
- Keep duplicate copies of important documents stored in a secure off-site location or on an encrypted USB storage device.

## **TASK**

- Document your vital documents and where they are backed up. If the list is extensive, use a spreadsheet like in Excel with the information.
- Document how your computer drives, files, and folders are backed up.
- Identify where the bulk of your documents and files are stored and how they are backed up. Include department-specific servers and files as well as individual workstations. Include key contact names and numbers to ensure that the information is available to your department if there is staff turnover.

## **OTHER VITAL DOCUMENTS**

While most documents and files are sent and kept electronically, there are still occasional paper copies of research notes, letters, and other documents. Consider how difficult it would be to replace these items. What if you couldn't get back into your lab to retrieve your lab notes?

## **BUSINESS CONTINUITY CONSIDERATIONS**

- Ensure that research notes, notebooks, letters, documents, spreadsheets, etc. are backed up to a network drive every day.
- Keep duplicate copies of irreplaceable notes, notebooks, manuscripts, and other documents in a safe location away from your lab or usual worksite.
- Regularly scan and save these items onto a network drive or onto an encrypted USB storage device.
- Regularly back up all information stored on laptops and tablets.

## **PEER SUPPORT**

During a disaster or other major disruption, consider the support that might be available from others in your field who are conducting similar research. Do you have a colleague or collaborator using the same samples, specimens, or equipment? Is there another university nearby with similar research facilities that you can turn to for support?

## **BUSINESS CONTINUITY CONSIDERATIONS**

- Create a list of peers, colleagues, or collaborators who might be able to assist you following a disaster or other disruption.

## TASK

- Document your support network and assistance they might be able to provide.

## EMERGENCY RELOCATION

A disaster, whether large or small, could force you to relocate your operations for an extended period of time. A laboratory fire, chemical spill, sprinkler malfunction, or even smoke from a fire in another lab, are just some of the incidents that might require you to relocate. Total recovery and restoration may take several days to several months. Where would you go if you couldn't use your current site? Do you have an available "hot site" you can move to immediately? Do you have a location in another building where you can transfer some or all of your work? Can you co-locate with a colleague in another lab? Planning now for the unthinkable will save you valuable time in the event it happens.

## BUSINESS CONTINUITY CONSIDERATIONS

- Consider developing a partnership with other laboratories or departments on campus that conduct similar research or use similar equipment as you. Arrange to store duplicates of vital records, backup supplies, and other materials in their lab. Review the partnership annually.
- Create a list of other laboratories or universities with similar equipment or running similar research.
- Identify the minimum alternate site requirements needed to resume operations if you were forced to relocate.

## TASK

- Write a brief description of the minimum space requirements of your work location. Include total square footage, room configurations, storage, utilities, environmental controls, and other requirements. Documenting this now will help if you need to find an alternate site quickly.
- Make a list of alternate sites that have been identified as possible locations to use in an emergency.

## EMERGENCY COMMUNICATIONS AND NOTIFICATION

Effective communication, both internally and externally, is crucial during any emergency, but also a frequent point of failure. Poor communication is often a top criticism after an incident. Effective emergency communications is more than just sending timely messages. Consider the following when developing your emergency communications plan:

- Who do you need to communicate with? Employees, students, visitors, vendors, department leadership?
- Who is responsible for communicating to each group?
- How will you communicate? E-mail? Phone? Text?

- What do you need to say? What do they need to know?
- How often will you communicate?

## **BUSINESS CONTINUITY CONSIDERATIONS**

- Make a list of your department's most important customers and all students/staff/faculty. Plan to communicate regularly with them before, during, and after an incident. Share your communications plan with them.
- Share your contacts list with key members of your staff in case you need their help with notifications.
- Create an emergency notification "call tree" to use during a disaster. See below for instructions.
- Prioritize who needs to be called and when they are called. Should you call your department chair before you notify students?
- Review and update all contact lists on a regular basis.
- Test your communications plan at least once per year.

## **EMERGENCY NOTIFICATION "CALL TREE"**

An emergency notification call tree is a quick and convenient way to notify your key contacts. To set up a call tree:

- Identify who needs to be called and who will call them.
- Determine who has the authority to activate the call tree.
- Include who will notify students, staff and faculty, department contacts, and vendors.
- Have a designated alternate for each call group in case the primary person is not available.

## **EMERGENCY NOTIFICATION BY EMAIL**

A call tree can also be done by e-mail. Create a group list of everyone to be contacted. Send out a test message at least once a year to ensure everyone is on the list. When sending out an emergency message, ask for a reply (either Reply All or just Reply to you) so you know who has received the message. *Note: Power or IT outage may impact sending and receiving e-mail.*

## **EMERGENCY NOTIFICATION BY TEXT MESSAGES**

Text messaging utilizes cellular phone service but can be more reliable during a disaster or other emergency. Even when cellular service is too weak or overloaded for voice calls, text messaging will often go through.

## TASK

- Create emergency notification call tree.

## EMPLOYEE PREPAREDNESS

The most valuable resources at UW are human resources. Following a disaster or other emergency, all of your preparedness and planning will go to waste if you don't have qualified people available to help execute the plan. Employee preparedness is an important part of your overall emergency preparedness planning and will help increase the likelihood that your employees will be safe and available after a disaster.

### EMPLOYEE PREPAREDNESS CONSIDERATIONS

- Ensure that your personnel are familiar with all aspects of your emergency and business continuity plans.
- Encourage them to have a personal preparedness plan at home. This should include an emergency communications plan as well.
- Encourage them to have a home and work disaster plan and disaster supplies kits.
- Encourage them to keep their emergency contact information updated in the HR system.

### ADDITIONAL EMERGENCY PREPAREDNESS CONSIDERATIONS

*Home and family:* Prepare your home and those who depend on you by creating an emergency plan that includes your emergency communications plan, information about what to do if you must evacuate, and how to shelter-in-place. Assemble a disaster supplies kit that includes essential items that you and your family would need if you had to evacuate or if you had to shelter-in-place for several days. Remember to consider the special needs of elderly family members, infants and children, and pets. Assemble a kit for your car as well. Additional information about emergency preparedness can be found at <https://www.washington.edu/uwem/> and <http://www.ready.gov>

*At work:* Talk to your supervisor about what your responsibilities will be during a campus emergency. This includes clarifying expectations and reviewing emergency plans and notification procedures. Employees who perform critical functions (support life, health, safety, security) may be required to stay at or report to work during a disaster. Assemble a workplace preparedness kit. Include change of clothes and shoes, medications, personal hygiene items, mobile device charger, snacks, and water. Additional information about emergency preparedness can be found at <https://www.washington.edu/uwem/> and <http://www.ready.gov>

## PUTTING YOUR PLAN IN PLACE

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### TESTING / EXERCISING YOUR PLAN

Once your business continuity plan is finished, you will want to test it to be sure you and the rest of your department or laboratory are familiar with it. One way to test your plan is to conduct a tabletop exercise or walkthrough. Include all of your planning team as well as others in your unit who would be involved during and after a disaster or major disruption. Develop a plausible scenario that might impact your department or laboratory (e.g., fire, sprinkler malfunction) and discuss the actions you would take to maintain your operations. Compare your discussions with your plan and make any adjustments as needed.

### SUMMARY / NEXT STEPS

Business continuity planning does not begin after disaster strikes. Planning begins right now, with you and your co-workers completing this guide. The information you have collected and the conversations you have with your staff will help prepare you to respond quickly and efficiently to any emergency and to establish a recovery plan that will minimize interruption to your vital work.

Having a business continuity plan will not prevent a storm or a burst sprinkler pipe, but it could potentially save you thousands, possibly millions, of dollars in losses, and years of research.

Now that you have completed the guide and checklist, here are a few final steps:

- Review your Mitigation/Follow-Up Actions list and establish a plan to complete the outstanding actions.
- Contact the Business, Academic and Research Continuity program at <https://www.washington.edu/uwem/resiliency/barc/> for information and training.
- Make an electronic copy of your plan and share it with the members of your planning team.
- Keep copies, either hard copy or electronic, at a separate location from your primary worksite.
- For a large department or laboratory, create an executive summary and distribute it to everyone during a staff meeting.
- Test your plan with your entire department or laboratory by conducting a tabletop exercise.
- Plan to review your plan in one year. Schedule the meeting now so you don't forget.

### TASK

- Capture ideas and suggestions that have been identified during the planning process that need to be addressed.
- Update your plan accordingly.
- Review your plan on an annual basis.