

Yale University

Continuity of Operations (COOP)

Planning Guide

What is COOP?

COOP = Continuity of Operations. Its purpose is to ensure the continued performance of minimum essential functions during a wide range of potential emergencies.

A COOP plan 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. COOP planning helps prepare Yale University units to maintain mission-critical operations after any emergency or disaster.

A COOP plan is not a one-time project with an established start and end date. Rather, it is a living document. It is essential that information and action plans in the COOP plan remain viable and current. The plan should be tested, at minimum, once a year.

The information in the COOP plan describes the organization's planning assumptions, objectives, and protective measures and thus may contain protected or sensitive information. The success of the plan, however, necessitates that key personnel have immediate access. All individuals with defined roles in the plan should be familiar with the COOP. Those who play an active role should continually ensure that adequate resources and capabilities exist for carrying out their roles. Most importantly, they must be prepared at home in the event a disaster affects the region.

University COOP Priorities

- Protect life and safety
- Secure critical infrastructure and facilities
- Resume teaching and research programs

Purpose of COOP Planning

- Provide for continued performance of essential departmental functions under all circumstances
- Ensure survivability of critical equipment, records, and other assets
- Minimize business damage and losses
- Achieve orderly response and recovery from the emergency
- Ensure succession of key leadership
- Serve as foundation for overall Yale COOP program
- Ensure survivability of Yale University in most severe events

Why COOP?

- Yale is vulnerable to numerous threats (large and small) that could interrupt normal operations
- Preparation dramatically increases your department's ability to recovery quickly
- COOP is a good business practice

Possible Reasons for COOP Plan Activation

- Building fire
- Flood
- IT malfunction

- Disgruntled employee
- Severe weather (e.g., hurricane)
- Pandemic
- Other

What could happen to Yale University if a COOP plan is not developed and maintained?

Consider the effects of Hurricane Katrina (2005) on several universities in Louisiana. Source: Chronicle of Higher Education

- Southern U. of New Orleans eliminated 19 academic disciplines
- Tulane laid off 233 faculty, eliminated 14 doctoral programs and 5 majors, and suspended 8 athletic teams
- LSU system predicted 5,000 layoffs from its New Orleans health system
- Dillard U. laid off 59% of faculty and staff
- Xavier U. laid off 58% of full-time faculty and 53% of staff

Reasonable Assumptions for COOP Planning

Access to buildings. If University officials have reason to suspect that a building is hazardous to enter, they will immediately close the building and call in trained Environmental Health and Safety (EHS) personnel. In the worst case (a major incident with damage to many buildings), the response and inspection process alone could take weeks, with hazmat cleanup and repairs taking much longer. *You may be unable to enter your building for an extended period of time.*

Locating temporary space. This will be a major challenge for the University, *so any arrangements you have made ahead of time will serve you well.* For example, make an agreement with another department in a separate building or with colleagues in another institution; anything you can do within your own unit will be to your benefit, such as sharing labs and offices that remain accessible. In an emergency that affects a number of buildings, the Office of the Secretary and the activated Emergency Operations Center (EOC) will also assist in the temporary relocation of departments. Priority will be given to essential University functions.

Computing infrastructure. Restoration of the University's many centrally supported IT applications and administrative systems will be of highest priority after any disruption. Examples include e-mail, Internet connectivity, Oracle, HR/Payroll, as well as the physical campus data network. Many resources continue to be directed toward hardening Yale's IT systems to minimize damage and aid quick recovery. Definite predictions, of course, are not possible. *Within your unit, you should work with your IT Manager—who in turn should work with ITS—to take steps to back up data and make plans for restarting your own servers and applications.*

Communications protocol. General communications with students, faculty, staff, and the public will be handled by the Office of the Secretary, the Office of Emergency Management, and the Office of Public Affairs and will be tightly managed so that messages are consistent. *As your unit resumes functioning, communications of an operational nature to your constituents (staff, faculty, students) will be your responsibility.*

Contacting your staff, faculty, and students. This will be a departmental responsibility. The Oracle system serves as the repository for employee contact information. Departments should maintain staff, faculty, and student emergency contact lists and institute a call-down tree as a best practice.

Care of staff and faculty. Many staff and faculty issues arise during disaster recovery: pay, temporary leave, temporary alterations of assignment, safety, benefits, work-at-home, stress, and family issues. *You should assume that Human Resources will be available with guidance and mechanisms to assist departments in these complex areas.* Conversely, departments should seek guidance from HR when uncertain how to act in these matters—both before and after an emergency. **Your HR Generalist is your strategic business partner and can assist you in these and other matters.**

Developing a COOP Plan: University Department Responsibilities

The process of developing your departmental COOP plan may take 3-6 months. The timeframe depends on the complexities of the department and the degree to which it already has emergency and/or safety policies in place. The first step in building unit preparedness is to assemble appropriate human and physical resources to do the job. COOP planning involves a series of actions, each of which contributes to a unit's ability to respond promptly and properly when an emergency occurs. Many of the actions that need to be taken must conform to the specific needs of the unit.

Getting Started

Appoint a COOP Planning Coordinator:

- The COOP Planning Coordinator should be a full-time member of the administrative team, and preferably an experienced employee who is thoroughly familiar with the unit and University procedures. Knowledge of the unit's programs and physical facilities is also imperative.
- The COOP Planning Coordinator will gather and communicate emergency information, coordinate and assist in evacuations, and maintain emergency response forms and other emergency plan materials.
- The COOP Planning Coordinator should be a person with the management experience and authority to:
 - Collaborate within the department to develop and maintain the information in the COOP plan
 - Recruit a core "Emergency Preparedness Committee" that represents staff, faculty, and principal investigators from the unit's major subdivisions or locations
 - Arrange related staff safety education and training
 - Coordinate resources for emergency preparedness and recovery
 - Purchase emergency supplies and equipment
 - Be ready to support managers during an incident
 - Be ready to help prepare post-emergency impact summaries and insurance claims
- COOP Planning Coordinators whose supervisors serve on the Yale Emergency Planning Team will also act as "Information Coordinator" for their area and provide information as needed to emergency staff.
- Some units already have individuals assigned to coordinate safety functions and may already have broad-based Safety Committees. These units can readily incorporate emergency preparedness planning into their programs.

Build a COOP Planning Team:

- The number of people on the team will depend on the size of the department/unit, its complexities, etc.
- The team will support and help the department resume operations when and if an emergency occurs.
- The team has an intimate understanding of the department and will help identify critical functions, as well as prioritize task and activities in the planning process.
- The team will support and help conduct tests, training, and exercises of the COOP plan.

COOP Plan Online Program

The COOP plan online program is designed to allow each COOP Planning Coordinator or team to enter department-specific information. Each page has planning tips, information, and links to help the team build a comprehensive and thoughtful COOP plan. Instructions, examples, and links are on the right-hand side of each page.

Supporting documents are also available. They include: (1) COOP Plan Training.ppt, (2) COOP Planning Guide, (3) FAQ, (4) Sample Plan (5) Reasonable Assumptions, (6) Unit employee special certification template, (7) Emergency Personnel Roster, (8) Emergency Response Team, (9) Emergency Contact Template, and (10) Checklist.

All of the documents that are part of your plan that are attached and uploaded will be saved on a secure server. These documents will be available to those in your unit who have access to the system. Each unit can request that up to 4 people have access to the system. The Department of Emergency Management, the Office of the Secretary, and members of the University Planning Team will also have access to view your COOP plan.

Overview

The online program will take you through 5 planning steps. Completing each step will bring you closer to completing your unit's COOP plan. You do not have to complete each step in order; the COOP planning team may approach this process as they see fit. The steps, further descriptions, and guidance are outlined below.

- Step 1- Unit Identification
- Step 2- Critical Functions
- Step 3- Information Technology
- Step 4- Faculty Preparedness
- Step 5- Key Resources

Your unit's focus should be:

- Identifying the functions and resources that are critical
- Safeguarding critical functions and resources against loss (*backup of systems and data, safe storage of research items*)
- Actions that will lessen the impact of losses (*pre-arrangements with other departments, schools, or sister campuses for mutual aid*)
- Replacing resources quickly (*contracts with vendors*)
- Performing critical functions without some of those resources (*teaching via distance-learning technology*)
- Providing your people with the information they will need, post-disaster, to get the campus back in action

1. Unit Identification

All units are responsible for development, update, and implementation of comprehensive plans to respond to the threats that their employees are most likely to face. These plans interact with and impact human capital management.

The unit's staff roster may be uploaded from the ORACLE System. It is important that your staff keep the information in Oracle, including a 24-hour emergency contact number, up-to-date. Once the roster is uploaded, it becomes a static list that includes names and contact information. If any changes occur within the staffing of your unit, make sure that this list is updated.

The team will develop and upload an employee emergency call-down list and procedures, evacuation procedures, and a list of special training or certification. In addition, the team and unit will work to identify an alternate location and an evacuation meeting site.

2. Critical Functions

The University's mission is teaching and research. Each college, division, and major administrative unit on campus exists in support of this mission. Each area performs functions that are critical to the ongoing success of the mission. The COOP focuses mainly on these critical functions: tasks that must be restarted in order to enable teaching or research to resume.

What are critical functions?

- Functions that need to be resumed within 30 days or less in order to minimize significant disruption of the mission of the University
- Functions that impact external or internal customers
- Functions that would cause delays or impact the services/operations of other units or Yale as a whole

Examples include functions that enable hiring of employees, that are required by regulation/statutes, and that relate to payroll, security, grant management, etc.

How do you integrate critical functions into COOP?

- Compile all unit functions
- Identify mission-critical functions
- Roster personnel to complete those functions
- Determine required resources and equipment
- Identify dependencies both up- and downstream

It may seem an overwhelming task to look at all of the functions of your unit. As you are covering this very important topic, remember to focus on ONE function at a time. It is important that the team determines whether each function is a critical or noncritical function. Ask yourself: (1) Does this function support the mission of the University? (2) Would we focus limited available resources on this function, or would we focus elsewhere? (3) What dependencies are associated with this function? (4) If it is not tagged as a critical function, what would the consequences be?

Remember to include those tasks or events that take place on a seasonal or quarterly basis.

Hint: It may be useful to ask your people to list what they do during the day in order to identify all tasks.

Once the team has identified all critical functions within your unit, determine the peak period or when this function is the most critical. What do you need in order to be able to complete this function? (staff, space, equipment, etc.) and within what time period? (Example: the maintenance of an MRI requires that nitrogen be delivered every two weeks to keep the magnets cooled, if the magnets are not cool, the cost of repairing the MRI could be in the millions of dollars.)

What vital records are needed and what are their locations? What are the consequences to the mission of the University if the function is not performed, and within what timeframe will it start causing harm?

Next you will develop a list of action items. These action items will be the most important things in your COOP plan. Action items are things that COULD be done now (or anytime before an emergency strikes) to make your unit more able to recover quickly. The typical action item begins with a verb and can be stated in one sentence. Some examples: Back up important documents onto a data stick weekly; Develop plan for secure storage of critical research materials; Cross-train 2 staff members to do departmental purchasing. Action items are ideas, not commitments to act. So think outside the box and don't feel constrained by resources. Some of your action items may be outside your department's sphere. That's okay; the University welcomes your ideas!

3. Information Technology

Identify critical applications. Determine "functional" and "technical" owners.

- The functional owner is the unit that authorized any modifications.
- The technical owner is the unit that has system administrator or programming access and implements any modifications.
- How quickly do you need this application?
- How many servers does your unit have?
- What are your workstation backup procedures?
- Who provides workstation support?
- How long will it take to recreate your office's current resources and restore normal operations?
- What do you need to restart your IT?

- Consider this scenario: the department's normal workplace is destroyed or inaccessible. New space, furniture, Internet access etc...

In the meantime, considerations for workarounds?

Action Items: What can you do NOW to get ready to reestablish your IT services rapidly? Would there be a cost?

Is working from home feasible? If so, is VPN accessible? Do the right people, based on their responsibility, have the appropriate access to the appropriate files? Are there any legal issues to be concerned about if information is duplicated or worked on from home? Work with IT on back-up solutions.

4. Faculty Preparedness

Individual faculty members drive teaching and research. It is vital that faculty make preparations to quickly and safely shut down and resume their teaching and research under what may be very adverse conditions.

This is the stage of your planning process where faculty input is most important.

5. Key Resources

The list in step 5 collects information that you may need close at hand in the early days after an emergency, when (1) crucial staff may not be reachable, (2) offices may not be accessible, (3) computer networks may be down, and (4) leaders/managers may have to handle issues outside their normal spheres

Key Unit Staff: These are the people you are relying on to respond to the emergency and resume operations. Avoid the temptation to list all your staff. The people to list here are those who can help "sort things out" and plan the next steps. Make sure you add after-hours contact information.

Delegation of Authority: Establishes a succession for key leadership positions.

Purpose: Continue operations and their essential functions. Ensure rapid response to any emergency situation requiring COOP plan implementation.

Other Key Resources:

- Staff from other units: Who are the most important people from elsewhere on campus that your staff will need to contact within the first few days after a disruption, as you plan how to resume your critical functions?
- Key Partners: Are there any external partners that your staff will need to contact within the first few weeks after a disruption, as you plan how to resume your critical functions?
- Key Vendors: Are there any external vendors that your staff will need to contact within the first few weeks after a disruption, as you plan how to resume your critical functions? In a severe or catastrophic emergency, deliveries may slow or cease at every level of the supply chain. Might your unit face a supply crisis? Do you need to adjust your inventory practices or stockpile specific items?
- Key Clients: Are there any clients (i.e., customers: CU or external) that your staff will want to contact after a disruption, to enlist their cooperation or to keep them informed? Also include any key donors or other key stakeholders.
- Equipment and Facilities: Please indicate on this screen the MINIMUM equipment and supplies you will need to resume ALL critical functions that you listed in Step 2. Estimate, don't agonize. Guess if you need to.
- Other Equipment: List major items only. DO NOT list consumables, classroom equipment, or lab equipment (for teaching labs or research labs, this information should be under "critical function"). Explain if necessary.
- Facilities: Do you require emergency power in order to continue these functions? Reminder: If you have emergency power needs, you should use the Emergency Power Requirements template located under the reference section.

- Supplies: What supplies (consumables) must your unit have in order to function?

Bringing it all together

After an emergency, the focus should be on the recovery of the people associated with the department and the recovery of the department's operational process.

Once the safety and security of people in the department has been assured and emergency conditions have abated, assemble your recovery team to begin the process of restoring the department's programs.

Employees will need prompt and accurate answers to their questions about the department's operational status, safety of the premises, and access. Your best efforts to provide this information in as many ways as possible will better facilitate the recovery efforts.

Specific Recovery Procedures

1. Activate your Unit COOP plan
2. Assess the emergency's impact on physical operations. Gather the following information:
 - Determine the extent of physical damage to buildings and equipment; photographs or videotapes should be taken of all damage to the facility and equipment before any repairs are made or areas are cleaned.
 - Review personnel issues (what staff was affected? who is able to support recovery?)
 - Determine your needs for facilities, equipment, personnel, or other resources that will speed the unit's recovery.
3. Provide ongoing reports on the department's recovery status to the Dean/ Officer/ University Emergency Operations Center.
4. Document the extent of damage. Most FEMA insurance claims require extensive documentation of damaged facilities, lost equipment and resources, and special expenses.

Disaster Safety Begins at Home: Family Disaster Planning

Encourage each employee to develop a family disaster plan. This is the MOST crucial part of the success of your plan.

Get Informed

- Learn about community hazards
- Learn your community's disaster plans
- Learn your community's warning system
- Learn about the University's disaster plan at www.yale.edu/emergencymanagement

Make a Plan at Home

- Meet with your family members and involve them in the planning process
- Choose an "out of town" contact
- Complete a family communications plan
- Take precautions
- Plan for those with disabilities and other special needs
- Plan for your pets
- Prepare for different hazards
- Update your contact information for Yale ALERT

Make a Plan at School

- Choose an “out of town” contact
- Determine emergency information
- Complete a personal communications plan
- Share information with Masters or Dean, roommates, friends and family

Assemble a disaster supplies kit at Home

- Flashlight with extra batteries or battery-powered lantern
- Battery-powered radio
- Fire extinguishers
- Food: enough nonperishable food to sustain you for at least 3 days (3 meals). Select foods that require no refrigeration, preparation, or cooking, and little or no water. The following items are suggested:
 - Ready-to-eat canned meals, meats, soups, fruits, and vegetables
 - Canned juices
 - High-energy foods (nuts, grains, beans, granola bars, energy bars, etc.)
- Water: keep at least one gallon of water available per person for 3 days, or more if you are on medications that require water or that increase thirst.
- Medications
 - Include usual nonprescription medication that you take (e.g., pain relievers, stomach remedies, etc.)
 - If you use prescription medication, keep at least a 3-day supply at your workplace.
- First aid supplies
 - Band-Aids, various sizes
 - Triangular bandages, several
 - Topical antiseptics and anesthetics
 - Sterile gauze compresses and tape
 - Tweezers, scissors, and non-mercury thermometer
- Tools and supplies
 - Emergency “space” blanket (mylar)
 - Paper plates and cups, plastic utensils
 - Nonelectric can opener
 - Personal hygiene items
 - Plastic garbage bags, ties (for personal sanitation uses)
 - One complete change of clothing
 - If you have pets, food, medication, litter, etc.
 - If you wear glasses, keep an extra pair with your workplace disaster supplies
 - Multi-use screwdriver, wrench, knife-type pocket tool
 - Twine, rope, and duct tape
- Assemble a disaster supplies kit at School
 - Flashlight with extra batteries
 - Medication
 - Include usual nonprescription medication that you take (e.g., pain relievers, stomach remedies, etc.)
 - If you use prescription medication, keep at least a 3-day supply.
 - First aid supplies
 - Tools and supplies
 - Personal hygiene items
 - One complete change of clothing
 - Family contact information and other important documentation
- Maintain your plan
 - Review your plan every six months
 - Restock your disaster supplies kit
 - At home: test alarms monthly and change batteries at least once a year

For more information on what you can do to prepare yourself and your family, visit, www.yale.edu/emergencymanagement, www.ready.gov or www.redcross.org

Testing, Training, and Exercises

Conduct orientation and training for identified COOP personnel. A PowerPoint presentation has been created to complement this planning guide. Additional training may be identified as you progress in this planning effort. For example, you may cross-train some of your staff so that you have some redundancies within your system. The Office of Emergency Management will be able to assist you in this process.

ALL plans must be periodically tested and updated annually. This includes the emergency alert and notification procedures. Repetition, practice, and training are the best preparation for a disaster response.

Completion of COOP Draft

The first step is to review the entire draft for accuracy. Use the checklist as a guide. Then provide copies to all employees with roles in the response and follow with an orientation, training, or Q&A session to answer any questions that your key staff may have regarding their plan and responsibilities.

Establish training and exercise schedule. For assistance on your exercise/table-top, contact the Office of Emergency Management.

Submit to Office of Emergency Management. The document will be reviewed for completion. The project manager will receive an e-mail when the document has been approved.

Additional Planning Considerations

- Designed to implement anytime without warning
- Consider human behavior and culture within your department as you are developing Standard Operating Procedures
- Capability to sustain operations for up to 30 days
- Will NOT work without trained staff that are prepared to respond at home and work
- Plan for protection, duplication, and movement of records
- Preposition resources and systems prior to COOP deployment
- Prioritize critical functions according to the order in which they must be restored to support each other.
- Consider three support teams: (1) COOP Planning, (2) Emergency Response, (3) Recovery.

Questions? Contact:

Maria Lavandier Bouffard
Director of Emergency Management
203-436-8597
maria.bouffard@yale.edu
www.yale.edu/emergencymanagement