

Ready for Anything?

College campuses without an all-hazards approach to emergency preparedness could be at risk, a new report finds. Plus: Best practices from schools that are doing it right.

NFPA Journal®, September/October 2010

By Fred Durso, Jr.

For years, Rollins College, a small liberal arts school in Winter Park, Florida, focused its emergency response plan on hurricanes. After all, what other threat could be more immediate in an area meteorologists refer to as "hurricane alley"?

The question was answered on April 16, 2007, when a gunman killed 32 students and faculty members at Virginia Tech. The tragedy highlighted the vulnerabilities that existed on college campuses and forced administrators at institutions across the country to consider significant upgrades to their emergency preparedness plans. Following the Virginia Tech shooting, Rollins, which enrolls 3,300 students, developed and implemented an all-hazards emergency plan that can cover a broad spectrum of threats ranging from natural disasters and pandemics to violent acts and cyber disruptions. Such a plan is designed to protect not only students and staff but also the institution's infrastructure, human services, and daily operations.

Finalized this summer, the new plan draws on best practices from other schools that suit the Rollins campus, says Brad McKown, the college's director of environmental health and safety. "We wanted to be consistent with the city of Winter Park, Orange County, and the state of Florida, which all use an all-hazards approach," he says. "If they're responding to our campus in an emergency, we can speak the same language. We can seamlessly interact with those responding agencies if we're using the same system they're using."

Recent natural disasters and violent acts at colleges and universities suggest that campuses remain susceptible to the fury of nature as well as man, despite the growing emphasis placed on emergency management and preparedness. Sharing best practices and identifying existing security concerns, however, might be among the best tools campuses can wield in their efforts to be prepared for the unthinkable.

That's the goal of the [National Campus Safety and Security Project](#) (NCSSP), a two-year effort to evaluate the current state of emergency preparedness, shortfalls in safety, best practices at educational institutions, and possible next steps leading to safer campus environments. For example, a new NCSSP report, [Ready to Respond: Case Studies in Campus Safety and Security](#), released in June, finds that, while most schools have an emergency plan addressing natural disasters and violent acts, fewer address medical emergencies, pandemics, or cyber disruptions. The report also outlines a variety of other concerns, including a lack of business continuity planning at educational institutions, insufficient signage for emergency preparedness, and inconsistency in disseminating emergency messaging. The report also highlights six institutions that appear to be getting it right, Rollins among them, particularly schools with strategies in place to help them remain operational post-emergency.

"What we're dealing with now is not how [an emergency] affects one part of an institution, but how it affects all parts," says James A. Hyatt, NCSSP's project manager and principal investigator. "The schools that are doing it right are involving all aspects of the college or university."

NFPA emphasizes the importance of emergency preparedness, and its array of relevant codes and standards could play an important role in helping colleges and universities implement NCSSP recommendations as part of effective emergency management planning.

Higher education organizations should use [NFPA 1600, Disaster/Emergency Management and Business Continuity Programs](#), to develop their campus emergency plans, and best practices should be shared and implemented elsewhere, according to Robert Vondrasek, NFPA vice-president for technical projects. "Because of NFPA's reputation in life safety, and with our diverse membership, we can be a facilitator and set the table to have higher education organizations come together to discuss these important issues, share experiences, and work together to find solutions," says Vondrasek.

Strengths + weaknesses

The NCSSP project was prompted by a series of campus emergencies in recent years, including the Virginia Tech shootings and Hurricane Katrina. Enacted by the [National Association of College and University Business Officers](#) (NACUBO) and eight other higher education associations, NCSSP was designed to help educational institutions address the four phases of emergency management: prevention and mitigation, preparedness, response, and recovery. A steering committee consisting of members from these associations reviewed existing literature on emergency management, compiled an online survey, and visited six institutions last year to develop case studies on the schools that exemplify best practices in emergency management.

Of the 342 institutions included in the survey, many have already set priorities for emergency management, according to the NCSSP report. Eighty-five percent of all respondents have a preparedness plan that at least meets protocols outlined in NFPA 1600, and more than 40 percent of institutions without a plan have one in the works. More than 90 percent of four-year public colleges and nearly two-thirds of private institutions have entered into mutual-aid agreements with fire departments, the police, or other agencies.

What's disconcerting to Hyatt is that only 30 percent of institutions have a business continuity plan that covers campus-wide operations. "Some schools had business continuity plans for the business services aspect of campus, but very few had one that encompassed the academic area," he says. "That's an area that needs further exploration."

An exception is Cornell University, which is among the six schools highlighted in the report. In 1999, facility personnel at Cornell conceptualized a business continuity plan that, in hindsight, was "static and lacked interface with the university's facility information system," says Ben Kuo, Cornell's associate director of environmental health and safety. Following the September 11 terrorist attacks, Hurricane Katrina, and the Virginia Tech shootings, however, Cornell strategized a more robust response that could handle such sizeable threats and connect all university departments during an emergency.

The survey also raises important issues around how campuses send and receive digital emergency alerts. Some schools require students and staff to "opt in"—that is, to register if they want to receive emergency messages via email or text—while others let recipients "opt out" of receiving email or text alerts that are otherwise automatically sent to all members of the campus community. While more than 75 percent of institutions with emergency notification systems use email and text messaging to notify the campus community of an incident, more than 70 percent of institutions require students

and staff to register, or opt in, for such messaging, the report finds. "The opt-in approach is not a very successful strategy for maximizing the number of participants in the program — it's spotty at best," says Bill Elvey, facilities management director for engineering, construction, and planning at the University of Texas at Dallas and an NCSSP steering committee member. Elvey says the opt-out approach would reach more people and would be more effective at alerting a campus community to an emergency.

Effectively sending alerts is only a piece of emergency management. Who sends them is also being examined. Many institutions limit the number of people who can send alerts to a handful of high-ranking administrators, a practice Elvey describes as problematic, since having only high-level administrators responsible for this task may lead to delays in disseminating emergency messages. In some cases, he adds, the facilities personnel or staff members in similar roles are the first to know about an emergency, and campuses might benefit if these people were also allowed to send alerts. "Depending on the urgency or seriousness of the situation, there really should be a range of people, from lower levels all the way up to the president, that have the authority to release messages in order to maximize the opportunity of notifying the campus community," Elvey says.

But technology has its limitations, especially if students and staff are not connected to the digital world. To address this, Virginia Tech has installed an array of signs across the campus that instruct students and staff on the proper response to fires, suspicious persons, bomb threats and explosions, hazardous materials, and power failures, according to Elvey, the former vice-president for facilities at Virginia Tech. The school has also installed warning sirens. While the NCSSP report indicates that more than half of the institutions surveyed place similar notifications in residence halls and laboratories, fewer than half place them elsewhere, and 20 percent of the institutions surveyed had no signs at all.

"I don't think this is the kind of information you post in some places and not all," Elvey says.

Best of the best

Along with the survey, the NCSSP report also includes detailed case studies that highlight best practices at Arizona State University, Purdue University, Tulsa Community College, and the University of Maryland College Park, in addition to Rollins and Cornell. "This is the first time these case studies have been put together holistically," Hyatt says. "We examined a variety of institutions—large public, small private, and everything in between. The purpose...was to create case studies that a school can take a look at and say, 'I'm similar in scope to Purdue. Here are some things they're doing, and maybe I can do something like that, too.'"

Cornell, for example, emphasizes a back-in-business plan to restart teaching and research within 30 days of any interruption at the main campus. Continuity plans are required from every department at the university and complement a comprehensive central plan that outlines temporary building space, infrastructure, and an income stream during emergencies. An online system developed by the university's Office of Emergency Planning and Recovery stores staff responsibilities and contact information, as well as information technology requirements for the Ivy League school, which enrolls about 20,000 students.

Rollins' method for disseminating emergency messages was also spotlighted in the report. Depending on the urgency of a situation and its threat to life safety, different administrative departments can respond to different events. If there were an extreme threat to life safety that required an immediate response, for example, officials in campus security, facilities management, or environmental health and safety, rather than the college president or upper management, would enact the alerts.

The University of Maryland College Park, which enrolls approximately 37,000 students at its suburban Washington, D.C., campus, adheres to an all-hazards emergency plan while requiring involvement from the campus community. The university hosts an annual Emergency Awareness Week every fall, as well as annual drills involving a variety of scenarios, including a potential terrorist explosion at the Comcast Center, the university's athletic arena, which seats nearly 18,000, and a major fire involving hazardous materials.

Despite these efforts, officials at Maryland, like those at most schools, have a difficult time engaging the campus community in emergency preparedness. "It's very hard to get students, faculty, and staff to buy into the fact that they need some modicum of preparedness," says Major Jay Gruber, the university's assistant chief of police and assistant director of public safety. The best tactic for upping campus involvement, Gruber says, might be one he has yet to discover. "Reinventing the wheel takes time, effort, and money," he says. "And if someone is doing it well, then you should steal it, you should take it. I have no pride in ownership. I'm happy to share things with people. I do it all the time."

NFPA's role

While institutions consider the report and the suggestions outlined in the case studies, NFPA may be able to assist in certain areas, specifically the report's recommendation — and Gruber's suggestion — to establish a nationwide clearinghouse on campus safety and security. This resource, according to NFPA's Vondrasek, could stem from further collaboration between NFPA and its partnering agency, [The Center for Campus Fire Safety](#) (CCFS), which aims to reduce fire deaths on college campuses nationwide.

Last May, CCFS launched the Campus Fire Data Project, an online data collection service providing statistical information on fire and life safety at colleges and universities nationwide. To date, 200 schools have voluntarily contributed data to the repository, a tool that will eventually identify fire trends at schools while offering another component to campus safety, says CCFS President Paul D. Martin. "Given that fire is one of the great threats to interrupt daily operations on campus, we're ready to integrate our expertise," says Martin.

Similar partnerships have also materialized. In 2009, NFPA and APPA, formerly the Association of Physical Plant Administrators of Universities and Colleges, began discussing the formation of a single document that would address fire protection and safety-related issues on campuses. APPA suggested that educational institutions be classified as a particular type of occupancy, potentially spurring NFPA to develop a code or standard for this setting. NFPA's Standards Council did not support that approach but recommended that NFPA staff explore "a product compilation to suit the needs of APPA in lieu of a new standard." One suggestion is to create a reference guide that outlines the nearly 160 NFPA codes and standards dealing with structures, systems, processes, and hazards prevalent on college campuses. Discussions are ongoing.

Further promotion of NFPA 1600 — a free, downloadable document available at www.nfpa.org/1600 may help address some of the report's concerns about educational institutions without business continuity or all-hazard plans. "I strongly recommend colleges and universities seek out subject-matter experts who can help identify and evaluate hazards that may impact their institutions," says Don Schmidt, chair of NFPA's Emergency Management and Business Continuity Committee and CEO of Preparedness, LLC, a Massachusetts-based consulting firm specializing in these issues. "Risk

assessment is the foundation of the entire emergency management and business continuity program." Promoting NFPA's two-day course on NFPA 1600 to colleges and universities is another option, he adds.

Another consideration is NFPA's help with a follow-up survey. "There's an interest [from the associations involved in the project] in seeing what progress will be made," Hyatt says. "The whole idea behind the study was that it wouldn't be a one-time-only event. The key is to maintain that focus and not wait for the next big event."

Fred Durso, Jr. is staff writer for NFPA Journal.