Disasters that interrupt a practice’s ability to provide care for patients can happen at any time and in any place, not just Texas, Florida, Puerto Rico or California. It’s likely that both large and small disasters will impact you at some point during your medical career.

In this first of a two part-series, we address the potential risk to your practice, your practice’s fit into the larger context and state law. In our second article, we’ll recommend helpful suggestions for restoring your business to normal operations as quickly as possible.

Potential Risk of Disaster to Your Practice
The risk of disaster in your practice is broad. It includes both natural and human-made disasters. Natural disasters include hurricanes, tornadoes, flooding, and other major weather events that often but not always are predictable in advance of their occurrence. Unpredictable natural disasters include fire, bioterrorism and contagious diseases. They may occur suddenly, spread over a widespread geographical area and require a more complicated response than that needed for forecasted disasters.

Given the heavy dependence on technology of most medical practices, the potential for human-made disasters is also great. Problems with telecommunications, computer operating systems and applications, heating and air conditioning systems and equipment malfunctions also qualify as disasters that can both interrupt your business and have a devastating impact on your practice.

Your Practice’s Fit Fit into the Larger Context
Most medical practices focus on the day-to-day care of patients and on those organizations with which they frequently collaborate (e.g., medical colleagues, hospitals, laboratories, vendors and suppliers). Although unanticipated failures in computer or telecommunications systems are restricted to the practice itself, many other disasters extend well beyond the practice’s four walls. Disaster planning, therefore, necessitates looking beyond your immediate environment and developing a good understanding of preparations that are made in your community, in your state, and at the national level.

We recommend communicating in advance with at least the following private and public health care providers, agencies, and organizations:

- Health care providers: local hospital; regional hospital or academic medical center; ambulatory surgery center; nursing homes; rehabilitation facilities; medical colleagues in your specialty; other providers
- Public health departments (local, county, state)
- Public safety departments (local, county, state)
- Fire departments (local)
- State medical board
- State medical society
- Federal Emergency Management Agency (FEMA)
- Department of Homeland Security (National Incident Management System [NIMS] program)

North Carolina Law
North Carolina has many laws and regulations that govern disaster planning for medical practices. Here’s a partial list of common questions and answers.

Laws and Regulations that Govern Disaster Planning for North Carolina Medical Practices

1. What state laws govern emergencies and disasters? Chapter 166A of the North Carolina General Statutes and Article 36A of Chapter 14 of the North Carolina General Statutes (Chapter 166A has 4 articles).

2. Is the statute that deals with natural disaster broad enough to cover emergencies that would arise out of a pandemic flu? Yes

3. How does North Carolina define a disaster?
An occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from any natural or man-made accidental, military, or paramilitary cause (G.S. N.C.G.S. 166A-4(1)).

4. How does North Carolina define a state of emergency? The condition that exists whenever, during times of public crisis, disaster, rioting, catastrophe, or similar public emergency, public safety authorities are unable to maintain public order or afford adequate protection for lives or property, or whenever the occurrence of such condition is imminent (NCGS 14-288.1(10)).

5. Who in North Carolina can declare a state of disaster? The governor can make a proclamation or the General Assembly can pass a resolution.

6. What types of disasters can be declared? Type I disaster – provided three criteria are met. This is not a federal disaster. Type II and Type III disasters – can be declared only when the United States president declares a major federal disaster that triggers assistance from Federal Emergency Management Agency (FEMA) and Small Business Administration (SBA).

7. What do we need to know about a Type I disaster? Type I disaster lasts for 30 days after the declaration and can be renewed for up to three additional months. State financial aid available mirrors the federal FEMA and SBA help that would be available in Type II and III disasters.

8. What do we need to know about Type II and III disasters? Type II disasters last for six months and can be extended for up to one year. State funds may be made available for acquisition and relocation for supplemental repair and replacement housing to individuals and families, and for any programs authorized by the General Assembly.

9. During a disaster or emergency in North Carolina, who in the state has the power to protect the public? The governor has broad authority. He/she can delegate certain duties to the secretary of the Department of Crime Control & Public Safety.

10. During a crisis, can the governor require public workers to work? Yes

11. During a disaster or emergency, what authority does the governor have over local governmental authorities? If the governor finds that local control of the disaster or emergency is insufficient to adequately protect lives and property, s/he can exercise his/her powers (Article 36A of Chapter 14).

12. What are some of the ways in which the governor can act during a disaster or emergency? He/she can procure by purchase, condemnation, seizure, or other means to construct, lease, transport, store, maintain, renovate, or distribute materials and facilities for emergency management (NCGS 166A-6(c)).

13. If our practice offers to allow the state to use our property, can we expect compensation? No

14. If our property is used during an emergency to shelter and protect people other than our own patients, can we be held civilly liable for the death of injury of any person or the loss or damage to property where these losses and injuries resulted from the use of the property for the above purposes. There is a waiver of private civil liability (166A-15).

15. What authority does the North Carolina State Health Director have during a disaster or emergency? The authority of the state health director is related to quarantine and isolation.

16. If there is an imminent threat of contagious animal disease, what powers does the State Veterinarian have? The state veterinarian can implement emergency measures and procedures, including quarantine and warrant inspections.

17. During a disaster or emergency, is there protection from potential malpractice liability? NCGS 166A-14(a) classifies those working in emergency management as working in government functions and therefore protected from liability for the death or injury to persons or property damage resulting from their activity. The exception to this important protection is willful misconduct, gross negligence, or bad faith.

18. How does the protection from malpractice liability apply to health professionals during a disaster or emergency? Providers have immunity protection if they are operating as emergency management workers at the request of the state or other level of government. If they are providing care to patients on their own initiative but are not considered emergency management workers, they do not receive special protection. (NCGS 166A-14(d)).

19. Does the North Carolina Medical Board have special powers during a disaster or emergency? Yes. The North Carolina Medical Board can issue a limited physician assistant volunteer limited license allowing physician assistants to perform medical acts, tasks, and functions without compensation, provided certain conditions are met (NCGS 90-12.1).

20. If a physician or other health care provider volunteers to provide care in the community, is there
Cancer Drug Discovery Methods Used to Identify New Lyme Disease Therapy

Antibiotics are currently the only treatments available for Lyme disease and other tick-borne illnesses, but researchers at Duke Health are working to expand the medical toolkit by identifying vulnerable areas of disease-causing bacteria that could lead to innovative therapies.

The research project, which recently received a $3.8 million grant from the Steven & Alexandra Cohen Foundation, relies on drug discovery methods that have proven successful in identifying treatments for cancer and viral diseases.

“Our goal is to find alternatives to antibiotics to treat Lyme disease, which is caused by the Borrelia burgdorferi bacterium, and illnesses that arise from the Bartonella pathogen,” said Neil Spector, M.D., the Sandra Coates Associate Professor Breast Cancer Research at Duke Cancer Institute and the study’s co-principal investigator.

“We’re hoping to move from isolating targets to identifying potential drugs to testing in animal models within three years – so a very aggressive timeline,” said Spector, who was a Lyme patient himself and nearly died from complications of disease.

“Our goal is to identify drugs that will target the Achilles’ heel of these pathogens while sparing the normal gut microbiome.”

Spector and co-principal investigator Timothy Haystead, Ph.D., professor in the department of Pharmacology and Cancer Biology at Duke, are collaborating with scientists at Johns Hopkins School of Medicine and Tulane Medical Center to perform distinct functions of the study.

The Duke team will use technology Haystead’s lab has pioneered for cancer drug discovery, which will identify protein targets for the development of a completely new class of molecularly targeted therapies for Borrelia burgdorferi and Bartonella.

The team at Duke will then screen thousands of new compounds to identify those that target the desired proteins. The new compounds identified at Duke will then be tested at Johns Hopkins in a high-throughput assay to evaluate their effects on the viability of Borrelia burgdorferi and Bartonella.

The most promising drug candidates will then be sent to Tulane, where researchers will determine their efficacy in animal models of Bartonella illnesses and Lyme diseases, including in primates.

The Spector and Haystead labs have already identified more than 20 bacterial proteins that represent attractive targets for drug development. The protein targets are selected in part for their specificity to Borrelia burgdorferi, which would reduce the risk of adverse side effects, such as the destruction of normal, healthy gut flora.

Duke researchers have begun screening a library of thousands of compounds looking for potential drugs that target a specific Borrelia burgdorferi protein, which plays a key role in promoting the survival of the bacteria.

The research project represents a new exploration for Spector, a leading cancer researcher who was instrumental in the development of lapatinib, the first oral inhibitor of the HER2/neu cancer promoting protein approved by the United States Food and Drug Administration for the treatment of a subset of breast cancers.

Spector’s interest in Lyme disease research stems from his personal experience with the infection, which he battled for years without a clear diagnosis. After suffering near-fatal heart failure, he underwent a heart transplant in 2009.

Spector said many features of cancer are also true of Lyme. For example, how and where tumors spread is not random. Similarly, Lyme affects different people in different ways, and Spector asserts that there are likely biological factors at play.

“I think there’s a way to capitalize on the lessons we’ve learned in cancer biology and basic research over the past 20 years and apply them to Lyme research,” Spector said. “We don’t have to reinvent the wheel.”