Disaster guide for pharmacists

by Jennifer Liang

It's tempting to think that disasters only happen to "other people." However, in the past five years, nearly every region of the United States has experienced challenges due to extreme weather. Natural disasters such as floods, hurricanes, tornadoes, and earthquakes have made their mark. But disasters are not limited to the whims of nature. Just this past January, a chemical spill in West Virginia's Elk River affected nine counties and 300,000 residents. A disaster could strike any community with minimal warning, if any at all.

When the emergency comes, the time to prepare has passed. If an ounce of prevention is worth a pound of cure, pharmacists need to be aware of how to prepare for a disaster, how to cope with the aftermath, and how to continue with daily operations.

PREPARING FOR AN EMERGENCY

First, consider which disasters your community would be vulnerable to. A tsunami is much less likely in Kansas than a tornado. Although the news might make it seem as if forest fires only happen in the western United States, fires are a distressing calamity for many families around the country. Gather items that would be useful in a variety of disasters, and include a few items that would be helpful in a community-specific situation.

Always anticipate power outages. A power outage can be a symptom of events ranging from blizzards to fallen trees. A backup generator and supply of fuel would be useful. Ice and coolers might be needed to store refrigerated medications. A charging device or external battery for cell phones will be useful. Items such as flashlights and first aid kits should always be present in the pharmacy.

Putting together an emergency kit is an excellent way to prepare for a disaster. The emergency kit should be accessible and easy to locate for any staff member. Something to consider putting in an emergency kit are a list of contacts that should be informed of any issues. Some other useful contacts might include the following:

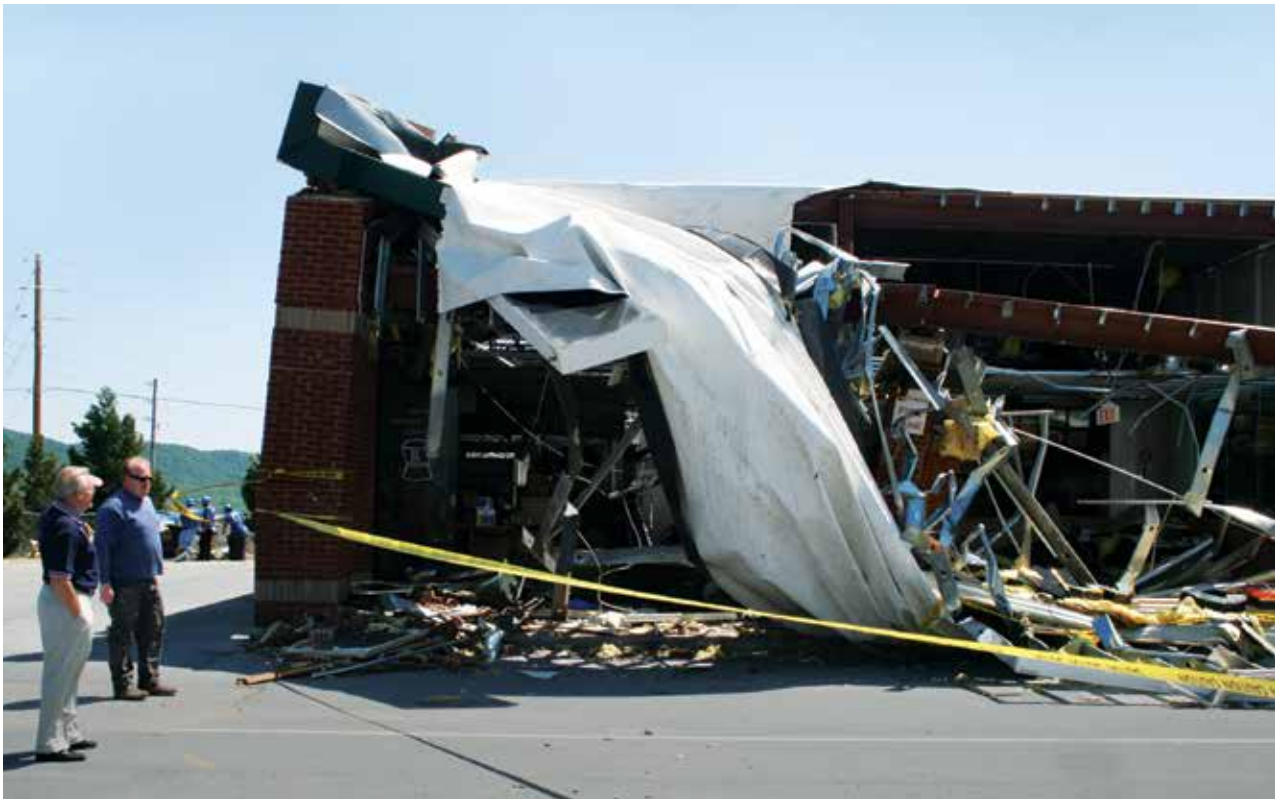
- Local emergency response teams
- Hospital and physicians
- Television and local media contacts
- Security & smoke alarm company
- Vendor, delivery, and wholesaler information
- Drug Enforcement Administration
- Board of Pharmacy

Specifically speaking, pharmacies may want to inform local media, hospitals, and physicians to communicate that people should not attempt travel to a closed pharmacy. I interviewed Rx Response's Erin Mullen, PhD, RPh, and certified emergency manager, who is part of a program that operates another way to communicate the status of the pharmacy: Rx Open. The Rx Open website, www.rxopen.org, displays maps during an emergency that show the status of a pharmacy and available shelters in the area. In this case, pharmacies can also use this tool to inform patients and emergency response agencies about their status as triage centers as well. Pharmacies can participate for free by contacting Rx Response at admin@rxresponse.org.

Other contacts, such as the DEA, the local board of pharmacy, vendors, and others should be informed if the pharmacy experiences any loss of infrastructure, equipment, or stock, including controlled substances.

Another piece of information should specify a system for how personnel will be contacted in an emergency. All employees need to know if the pharmacy needs to be evacuated or closed. Also, the pharmacy should prepare a protocol of how pharmacy operations will be restored after the disaster.

Data loss might be a problem if the computer systems are damaged by water or other physical destruction, so it is important to keep two sets of backup data about prescription information and inventory. One set of data should be kept in the pharmacy where it is easily accessible and safe. The other should be kept in a secure, off-site location where trusted staff members have access to it.



Disasters can strike anytime, often without warning. Preparing for an emergency beforehand can help mitigate its effects on business and patient care.

Additional information, including a disaster preparedness checklist and assistance form, can be found at the NCPA Foundation website: www.ncpafoundation.org/.

DISASTER EDUCATION FOR PATIENTS

Community pharmacists provide more than just patient care; they are educators. In an emergency, patients also need to be informed about their options. Encourage patients to receive refills in a timely manner and to fill their medications before the disaster event, if possible. Patient counseling sessions are one of the best times to drop good ideas about how to take care of their medications during an emergency. Information about drug exposure to heat, unsafe water, or loss of potency is a possibility in even common household situations.

Counseling points could include storing ice packs in the freezer in case the power goes out and a diabetes patient needs to store insulin. A patient with a history of angina might want to include a reserve bottle of nitroglycerin in a first aid kit. Proactive choices will make patients more able to withstand disasters, but they might not realize what they can do to help themselves.

COMMUNICATION

Pharmacies can also communicate about disasters by partnering with a local health department. Websites of local health departments often provide ways to receive community safety alerts. Furthermore, some have programs in which local pharmacies can become part of a network to collaborate with physicians and shelters. You may find your local health department at www.NACCHO.org or your state health department at www.ASTHO.org.

DURING A DISASTER

The first thing to do while the disaster is taking place is to be sure you are prepared personally. Only then will pharmacy services to the community be most effective. Pharmacists and pharmacy staff also need to prepare their own homes for a disaster. Preparation of the pharmacy to help others means nothing if you have not survived to participate in efforts to help the community.

If the pharmacy is still open during a flood or tornado, it might become a shelter for whoever is still in the pharmacy. Patients and staff may not have been able to evacuate quickly enough or get to safer places. In that case, staff members should take proper action to keep everyone safe.

Pharmacy staff members should know basic protocols for disasters in which they cannot leave the pharmacy. Reg-

> ***Community pharmacists provide more than just patient care; they are educators.*** ***In an emergency, patients also need to be informed about their options.***

ular disaster drills and accessibility to information about how to deal with disasters can ensure that everyone is trained properly to deal with an extreme weather event.

If possible, try to prevent physical damage to the pharmacy. Practices such as shutting down computers, covering them with waterproof materials, covering controlled substances with waterproof materials, and moving them to a safe place would minimize time and financial damages.

AFTER THE DISASTER

It is important to restore the integrity of the pharmacy system in order to re-open. Any drugs that were lost or damaged will have to be reported to pharmacy or local authorities, according to state laws. The pharmacy will need human resources, but the needs of the staff also need to be considered. Their first priority will be to stay with their families.

After a disaster, the community will look to health care facilities as beacons of support. Communities will not be open until businesses that provide basic support are open. Pharmacies are a part of this basic support category because they are places where people can turn to get help for the consequences of disasters.

After opening, pharmacists will need to consider the possibility that they will become triage centers—places where people will go to seek remedies that can be managed at home. Patients with wounds, insect bites, or burns will all seek a triage center to help manage their various injuries. Pharmacist aid can also help to treat problems such as endemic diarrhea, cholera, small wounds, and pain.

The problems after a disaster can range from mild to deadly. Some such deadly problems include hygiene and water issues. After a natural disaster such as a flood, hurricane, or a chemical spill, finding clean water is a serious and pressing issue. According to a 2005 Centers for Disease Control and Prevention survey regarding the needs after Hurricane Katrina, 37 percent of households had trouble finding functional indoor toilets and 26 percent were dependent on relief agencies for drinking water. Drinking contaminated water puts people at risk for water-borne illnesses. Some diseases to watch out for include diarrhea, infection from Hepatitis A or E, or zoonotic diseases. Other ailments to consider are malnutrition, diseases associated with crowding, and vector borne diseases. (The CDC emergency preparedness and response site is www.bt.cdc.gov/disasters/.)

Some disasters may not affect the pharmacy directly, but will affect the community. Building collapses or fire damage may affect a large number of people who may turn to the pharmacy for immediate care.

Thus, pharmacists will need to be prepared to make recommendations for OTC products that could provide symptomatic relief or referrals to other professionals. Meet with local health department officials and ask if there are supplies they want you to stock or discuss ideas for mutual support during an emergency.

In the same survey by the CDC, about a third of those surveyed either needed a prescription filled within a few days, needed medical care, or sought medical care. The report by Emily Lord and Erin Mullen of Rx Response shows that 93 percent of Americans live within five miles of a pharmacy. Coupled with the idea of already overcrowded and distant emergency rooms, it is clear that pharmacies should become another line of support for people after a disaster.

Of course, the nature of a community epidemic will depend on the nature of the disaster. Therefore, coping strategies of the pharmacy will depend on the needs of the community.

Finally, the best way to deal with a natural disaster is to be well prepared. There are success stories of pharmacies that were able to manage disasters and re-open within a few days of the event. This is because they were prepared well in advance. Although there are disasters for which no amount of preparedness can mitigate the consequences, it is important to know what pharmacists can do. Knowing what to do before, during, and after a disaster can make the process of recovery much smoother. As important facets of the community, pharmacies should prepare as much as possible so that they can both keep the pharmacy and the community functioning. ■

Jennifer Liang is a 2015 PharmD candidate at St. Louis College of Pharmacy.

