



The Role of the PT and PTA in Disaster Management

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The consequences of disasters (serious disruptions of the functioning of a community or a society at any scale due to hazardous events) can be devastating. While immediate response to a disaster usually is managed locally, outside assistance may be needed if local resources are exhausted. Domestic and international aid may be called on to effectively manage the area's health, structural, and economic impacts.

Physical therapist services can be an important component to emergency preparedness, disaster response, and recovery, given that PTs and PTAs are uniquely positioned to understand mechanisms of injuries and many health conditions that result from a disaster. PTs and PTAs can assist with triage and provide interventions for injuries such as spinal cord injury, amputation, traumatic brain injury, fractures, burns, and peripheral nerve injury — as described by the World Health Organization's Minimal Technical Standards and Recommendations for Rehabilitation. They can provide interventions that can free up ICU beds or reduce patients' need for equipment such as ventilators when demand is overwhelming. Additionally, because PTs and PTAs are experts in mobility, they can address accessibility challenges during an evacuation and migration to displacement facilities, such as for people with disabilities or older adults who use assistive devices or otherwise need help moving from one place to another. PTs and PTAs also are valuable in prevention and management of orthopedic strains placed on fellow emergency workers.

While these resources were compiled during 2018 and 2019 — before the novel coronavirus was identified and began infecting hundreds of thousands of people in the wake of the COVID-19 pandemic — the information provided here is certainly relevant to disasters caused by biological hazards such as transmittable diseases. These resources will be updated as new research and guidelines are developed.

We strongly recommend that you carefully consider the inherent risks involved in going to a disaster zone, as well as your personal, professional, and financial capabilities, before deciding to volunteer in a state or country outside of where you live, or even in your own state or community.

If you want to respond to a disaster, you first must engage with local emergency management agencies. We don't recommend that you go to a disaster zone on your own without the guidance and coordination of an established organization that specializes in disaster response. Doing so would increase your personal risk of harm, increase the burden on the current responders, and potentially cause more damage to already strained communities. Responding to a disaster should be a well-considered action that you've prepared for. You also should clarify if your role is as a licensed health care professional operating within a state scope of practice, or as a volunteer operating with no specific pre-set role.

Responding to the APTA House of Delegates

Recognizing the importance of the roles of PTs and PTAs in disaster management, in 2018 the APTA House of Delegates charged the association with the following:

That the American Physical Therapy Association engage and collaborate with disaster management agencies to identify the professional roles of the physical therapist and physical therapist assistant in disaster preparation, response, relief, and recovery. Further, that APTA promote the role of the PT and PTA to members, and to agencies that study and manage disasters so that the expertise of PTs and PTAs can be utilized appropriately.

The resources here are part of our efforts to answer the House's charge and help you to enhance and use your knowledge and skills in all stages of disaster management, to support the development of policies that help local communities and states prepare for disasters, and to encourage discussion on the ethical and legal considerations of providing disaster management services.

It's a good idea to review "Responding Internationally to Disasters: Do's and Don'ts Guide for Rehabilitation Professionals" published in 2016 by Humanity & Inclusion and reviewed by The International Spinal Cord Society, ISPO, the International Society of Physical and Rehabilitation Medicine, the World Confederation for Physical Therapy, and the World Federation of Occupational Therapists. Following is an excerpt:

Before Leaving Home

I am thinking of helping. What should I do to get involved?



DO

- Consider ways to help without traveling to the disaster area, such as making donations and supporting disaster relief organizations.
- Consider your desire to respond before any disaster hits and develop your skills and experience appropriately.



DON'T

- Depart in haste assuming your help is needed. (Chaudry and Beasley, HPA Resource, 2013, Vol. 18, No. 4, pp18-20)

Do I have the appropriate skill, knowledge, and experience to work in a humanitarian environment?



DO

- Have an understanding of the Humanitarian Code of Conduct and Humanitarian Principles and working cross-culturally.
- Have specific clinical skills in the management of conditions in resource-constricted environments through either training or working internationally in nonemergency settings.
- Assess that you have the clinical skills needed for your role — normally at least two years of experience in the clinical area you will be working in.
- Assess if you have the language skills needed and an understanding of the local context.



DON'T

- Go without experience or training in humanitarian or resource-constricted environments.
- Go without having appropriate clinical skills.
- Go without the knowledge or skills to adapt to an emergency environment.

Case study: Most of the volunteers who came were there for two weeks, so by the time they adapted to the environment it was time for them to go. Patients as well as the staff had to adjust to a lot of changes due to this practice. Not all the volunteers were experts in emergency management and hence took time to adapt to the new situation in emergency. Psychologically, the staff and patients had to suffer due to this constant adaptation and turnover.

For more information on the role of physical therapy in a sudden-onset disaster refer to these resources:

- World Confederation for Physical Therapy (WCPT) Disaster Management
- Global Physio Podcast GP012 with Peter Skelton

Before a Disaster: Planning and Preparedness

The role of the PT and PTA in disaster management is not only in the immediate response or recovery efforts. You have important roles in disaster planning and preparation activities. These may include participating in policy and strategic planning for your local community and developing your own facility's emergency preparedness plan. You also can advocate for identifying an individual's function and quality of life as priorities that should accompany lifesaving interventions that are planned for in advance.

You can use the WHO Minimal Technical Standards and Recommendations for Rehabilitation when speaking to local, state, and federal agencies about defining the role of the PT and PTA as part of emergency medical teams.

For disasters within the United States, another consideration for planning efforts is interstate mobility and practice in terms of state licensure. The Physical Therapy Compact, an interstate license for physical therapists, can reduce barriers to quick action if you want to respond to a disaster in another state. It's a good idea to know which states are part of the compact. Either contact your home state's licensure board or visit the **Physical Therapy Compact website to learn more** — and to advocate for your state to join the compact if it hasn't yet.

Finally, consider your personal situation. These factors are among those that may influence your personal preparedness to engage in disaster relief activities:

- Personal fitness. You need to be physically and mentally prepared to work long hours, be sheltered in austere conditions, and work with individuals who have recently been through a traumatic event.
- Family and work support. You may need to leave family members and any work you're engaged in on short notice, so ensure that you can leave your normal responsibilities without burdening others with your absence.
- Personal finances. You need to have the financial capability to leave your normal income source. Be prepared to purchase airline tickets, food, and shelter on short notice.
- Travel. Your passport needs to be current with at least 6 months left before the expiration date, and should have enough blank pages in your passport for visas, if required.
- Vaccinations. You need to know which vaccinations are required for travel. Check with your medical provider, and visit the Center for Disease Control and Prevention's Guide to Vaccination Recommendations.



Denise English, PT, provides care to a young man who sustained a spinal cord injury while he was trapped under rubble, causing paraplegia. English was in Haiti volunteering with Health Volunteers Overseas when the earthquake hit on January 12, 2010, and she was able to immediately engage in response efforts. "Physical therapists are communicators," English says, "and communication is key in these situations on so many levels: listening first and then speaking."

There are four main areas to consider in disaster response and recover: licensing and regulation, facility preparedness, essential clinical skills, and ethical considerations.

Licensing and Regulation

The time to prepare and be ready to respond to a disaster is not when it occurs, but well beforehand. Legal and regulatory implications for responding to disasters differ depending on the disaster's location.

Services provided via by telehealth have been a large focus of the COVID-19 pandemic. State entities may relax rules governing provision of services using telehealth during a crisis, which allows providers to furnish needed services to patients while protecting both patient and provider from potential harm from dangers such as contagions. Check the state practice act before considering telehealth services.

Within your state: Be aware of any state or local government or nongovernment organizations that are designed to mobilize volunteers in case of an emergency. There are challenges of having volunteers show up unannounced. Hospitals, health departments, and other facilities will need to be able to verify your license or certification credentials before they allow you to assist. Loss of telecommunications during an emergency may further delay verification of licensure. The **Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP)** is a federal program that helps jurisdictions verify health professionals' identification and credentials so they can respond faster in cases of disaster. For example, California has developed the **Disaster Healthcare Volunteers System** to preregister, verify license, manage, and mobilize willing volunteers.

Outside your state: Each U.S. jurisdiction has licensure requirements for health care providers. Entering a state to practice without a license in that state may result in disciplinary action and could put your license or certification in jeopardy. Case in point: ESAR-VHP reports that in the aftermath of the attacks on Sept. 11, 2001, thousands of people traveled to New York City to volunteer to provide medical care, but local authorities were unable to distinguish those who were qualified from those who were not, and hospitals and other care facilities were unable to verify basic licensing information.

During declared states of emergency the local government may allow individuals with valid professional licenses issued in other states to render services at the disaster site. For example, during Hurricane Irma, Governor Rick Scott in Florida issued an executive order with the following language: "Medical professionals ... with good and valid professional licenses issued in states other than the State of Florida may render such services in Florida during this emergency for persons affected by this emergency with the condition that such services be rendered to such persons free of charge, and with the further condition that such services be rendered under the auspices of the American Red Cross or the Florida Department of Health."

Outside the United States: Be aware of additional considerations if you want to respond to a disaster in another country. As in the U.S., medical care is highly regulated in most countries. Accrediting physical therapists, as well as physicians, nurses, and other providers, through licensure or registration is a responsibility of the ministry of health in most countries. Before you make plans to travel internationally, be aware of the registration and regulation requirements of the country where the disaster is located and ensure that your presence is needed and wanted.

Case in point: After the earthquakes in Haiti, the arrival of many volunteers (many from the U.S.) who did not belong to any formal organization and had no prior disaster training added to the chaos and confusion. Many arrived without food, water, shelter, or medical equipment. There were reports that some medical teams or individuals falsely claimed they had the qualifications to practice beyond their scope and ability.

The time to prepare for a disaster is before it occurs. Training and preparing for self-sufficiency (such as food, water, shelter, and medical supplies) will help keep you from becoming a victim and adding to the overall demands of the disaster. Also, APTA recommends against going to a disaster zone on your own without the guidance and coordination of an established organization that specializes in disaster response.

In light of the COVID-19 pandemic, APTA created a sign-up opportunity, the **COVID-19 PT Volunteer Register**, within its APTA Engage volunteer portal to match facilities that need help to PTs, PTAs, and students with the right qualifications who would be able to pitch in.

Facility Preparedness

In addition to personal planning and checking license regulations, PTs and PTAs have a role in emergency preparedness for their own place of work — where a disaster can hit just as easily as it can anywhere else. Weather emergencies can wipe out entire offices, clinics and hospitals along with business and patient medical records. Even if your physical structure survives, your business and health records may not due to residual water, electrical and other damage that can destroy both paper and computer records. The Centers for Medicare & Medicaid Services' Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers establishes consistent emergency preparedness requirements for health care providers participating in Medicare and Medicaid, to increase patient safety during emergencies and provide a more coordinated response to natural and human-caused disasters. The Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response worked closely with CMS to develop the requirements. The resource links below can help you comply with the requirements and prepare your practice or facility for an emergency. Check them yearly for accuracy and currency.

- **APTA Fact Sheet on CMS Emergency Preparedness Requirements Final Rule**

In 2016 CMS published emergency preparedness requirements for health care providers who participate in the Medicare and Medicaid programs to increase patient safety during a disaster.
- **HHS Healthcare Emergency Preparedness Information Gateway**

The Healthcare Emergency Preparedness Information Gateway — also known as TRACIE, for technical resources, assistance center, and information exchange — was created to meet the information and technical assistance needs of health care entities, health care providers, and others working in disaster medicine, health care system preparedness, and public health emergency preparedness. The website contains planning materials, templates, and help for providers in understanding their obligations under the CMS emergency preparedness regulations. In particular are these resources:

 - Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers
 - State Operations Manual Appendix Z — Emergency Preparedness for all Provider and Certified Supplier Types: Interpretive Guidance
 - Emergency Communication Tools
- **Additional resources:**
 - Americans with Disabilities Act National Network: Emergency Preparedness Resources
 - Prepare My Business: Hurricane Preparedness Checklist
 - FEMA: Hurricane Safety Tips
 - FEMA: Earthquake Preparedness
 - FEMA: Severe Weather Tips

During a Disaster: Response and Recovery

The guiding principle “build back better” in all recovery efforts means to create a sustainable environment for individuals after you leave the disaster area. This “build back better” principle was defined by the United Nations General Assembly in 2016 as: “the use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies, and the environment.” To do this effectively requires connecting with local physical therapists and other health care providers to plan for conclusion of care and appropriate follow-up options, both for individuals and for communities. We recommend that, in addition to connecting with APTA on the national level, you connect with state APTA chapters and, if outside the United States, the appropriate physical therapy association, if one exists. These organizations will know best what services are available throughout the state or country. Building back better also may include capacity training/technical skills training for local PTs and other rehabilitation professionals as well as communication with local community-based rehabilitation coordinators and informal rehabilitation providers.

The **International Network of Physiotherapy Regulatory Authorities** and the **World Confederation for Physical Therapy** are great resources of additional information about country-specific regulatory requirements. In addition, the following are recognized domestic and international response agencies.

Domestic disaster response agencies:

- U.S. Department of Health & Human Services, Office of the Assistant for Preparedness and Response
- Medical Reserve Corps
- National Disaster Medical System
- Federal Emergency Management Agency
- Community Emergency Response Team
- Emergency Management Institute
- Centers for Disease Control and Prevention, Emergency Preparedness and Response
- Clinician Outreach and Communication Action
- National Voluntary Organizations Active in Disaster
- Team Rubicon

International disaster response organizations:

- International Committee of the Red Cross
- Humanity & Inclusion
- Disasterready.org

Essential Clinical Skills

To provide the best care as a volunteer, you should have advanced knowledge and experienced skills in a variety of clinical areas. Injuries and conditions encountered in an emergency disaster will vary depending on the type and severity of the event and its aftermath.

Humanity & Inclusion, an independent charity working with vulnerable populations and people with disabilities, has several useful resources for rehabilitation professionals volunteering in disaster settings:

- Early Rehabilitation in Conflicts and Disasters
- Rehabilitation in Sudden Onset Disasters

Additional resources for clinical skills to address common situations include:

- First Aid
- Amputation Care Grand Rounds: Management of Dermatologic Issues in Prosthetic Users
- Amputation Grand Rounds: Secondary Health Complications Following Lower Extremity Trauma/Limb Loss
- Amputation Grand Rounds: Post-Operative Management — Goals, Strategies and Dressings
- Screening for Fractures: Diagnostic Imaging and Beyond
- Management of Patients with Integumentary Disorders
- Psychological First Aid
- Infection Control
- Spanish for Physical Therapists: Tools for Effective Communication

Ethical Considerations

Traveling to a disaster zone either domestically or abroad is a personal decision. Often the deciding factor between providing financial assistance from home or traveling to a disaster zone requires deep reflection on your capability and motivation.

APTA recommends that anyone traveling to a disaster zone only do so with an organization that specializes in disaster response and that only physical therapist services that are within the scope of physical therapist practice are provided.

The U.S. State Department states:

“We strongly discourage you from traveling to the affected area to provide direct assistance; those who are not trained emergency response officials often end up requiring assistance themselves. Instead, please consider organizations actively providing aid.”

The International Committee of the Red Cross has **a free course on the rights and responsibilities of health care personnel working in areas of armed conflict and other emergencies.**

Providing financial assistance to established organizations is an alternative or additional way to support those in need after a sudden-onset disaster. The United States Agency for International Development Center for International Disaster Information provides **a list of organizations that accept donations in support of disaster relief.**

All PTs and PTAs are obliged to follow either the APTA Code of Ethics for the Physical Therapist or the Standards of Ethical Conduct for the Physical Therapist Assistant, as applicable, whether working or volunteering in the U.S. or abroad.

In addition to following U.S. laws and regulations, PTs and PTAs must follow the local laws of the country they are in. In some cases, foreign countries do not have established practice acts or laws governing physical therapist practice. Globally, PTs should follow the World Confederation for Physical Therapy’s ethical principles.

Documentation

Being in a disaster situation doesn’t excuse you from providing documentation of the services you provide to patients; it is at least as important as it is in all other patient care settings. Have a mechanism in place for fully documenting the services you provide to each patient, for both liability and communication with other team members. Follow the standards for documentation set by the disaster team.

Glossary

These terms and descriptions are from the United Nations Office for Disaster Risk Reduction:

Disaster. A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to one or more of the following: human, material, economic, and environmental losses and impacts.

Emergency. Sometimes used interchangeably with the term “disaster,” as, for example, in the context of biological and technological hazards or health emergencies. However, emergencies can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.

Disaster management. The organization, planning, and application of measures preparing for, responding to and recovering from disasters.

Hazard. A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts; property damage; social and economic disruption; or environmental degradation.

Biological hazard. A hazard of organic origin or conveyed by biological vectors, including pathogenic microorganisms, toxins, and bioactive substances. Examples are bacteria, viruses (such as SARS-CoV-2, which was responsible for the COVID-19 pandemic), parasites, and venomous wildlife and insects, poisonous plants, and mosquitoes carrying disease-causing agents.

Environmental hazard. A hazard that may include chemical, natural, and biological activity. They can be created by environmental degradation or physical or chemical pollution in the air, water and soil. However, many of the processes and phenomena that fall into this category may be termed drivers of hazard and risk rather than hazards in themselves, such as soil degradation, deforestation, loss of biodiversity, salinization, and sea-level rise.

Geological or geophysical hazard. A hazard that originates from internal earth processes. Examples are earthquakes, volcanic activity and emissions, and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris or mud flows. Hydrometeorological factors are important contributors to some of these processes. Tsunamis are difficult to categorize although they are triggered by undersea earthquakes and other geological events, they essentially become an oceanic process that is manifested as a coastal water-related hazard.

Hydrometeorological hazard. A hazard of atmospheric, hydrological, or oceanographic origin. Examples are tropical cyclones (also known as typhoons and hurricanes); floods, including flash floods; drought; heatwaves and cold spells; and coastal storm surges. Hydrometeorological conditions may also be a factor in other hazards such as landslides, wildland fires, locust plagues, epidemics, and in the transport and dispersal of toxic substances and volcanic eruption material.

Technological hazard. A hazard that originates from technological or industrial conditions, dangerous procedures, infrastructure failures, or specific human activities. Examples include industrial pollution, nuclear radiation, toxic wastes, dam failures, transport accidents, factory explosions, fires, and chemical spills. Technological hazards also may arise directly as a result of the impacts of a natural hazard.

Preparedness. The knowledge and capacities developed by governments, response and recovery organizations, communities, and individuals to effectively anticipate, respond to, and recover from the impacts of likely, imminent, or current disasters. Preparedness action is carried out within the context of disaster risk management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response to sustained recovery.

Prevention. The concept and intention to completely avoid potential adverse impacts of hazardous events. While certain disaster risks cannot be eliminated, prevention aims at reducing vulnerability and exposure in such contexts where, as a result, the risk of disaster is removed.

Recovery. The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural, and environmental assets, systems, and activities of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better,” to avoid or reduce future disaster risk.

Additional Reading

Berge-Poppe P, et al. Impact of physical therapist training, experience, and role certainty on confidence when responding to a public health event crisis. *Physical Therapy Journal of Policy, Administration and Leadership*. 2019;19(1).

Crandall D. Compliance Matters: Before disaster strikes. *PT in Motion*. 2013;5(9):46-48.

Klappa S., et al. Compassion fatigue: a conceptual model for re-entry after disaster relief work in Haiti. *Physical Therapy Journal of Policy, Administration and Leadership*. 2016;15(4).

U.S. Department of State Bureau of Consular Affairs. International Travel. Natural Disasters.