The evolution of pharmacists' roles in disasters, from logistics to assessing and prescribing

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In terms of mitigating the health-related impacts of disasters, pharmacists are the unsung heroes. Without them, there would be no medications for patients in need during and following a disaster or emergency. These days, pharmacists offer more than just logistics and dispensing during emergencies, which parallels the evolution of the profession.

Pharmacists have always been assisting in emergencies but previously have rarely been recognized for their contributions. Before 2001, pharmacists were only acknowledged for their primary role in logistics—getting drugs to where they were needed in an emergency. Figure 1 illustrates the evolution of pharmacists' roles in disasters as outlined in the literature.

- Before 2001, the accepted role was logistics only. 1,2
- In 2001, following the terrorist attacks and anthrax scares in the United States, pharmacists were identified as being invaluable during bioterrorism threats in providing their expertise (screening and treating).³⁻¹¹
- In 2003, the severe acute respiratory syndrome (SARS) outbreak in Canada saw pharmacists becoming an essential information source for community members and patients.^{12,13}
- In 2005, Hurricane Katrina saw pharmacists' scope of practice being temporarily extended to include prescribing of 30-day emergency medication supplies and using other clinical skills that were needed in the absence of other health care providers.¹⁴⁻¹⁶
- In 2016, in Australia, the Thunderstorm Asthma event acknowledged that pharmacists were an integral part of the emergency response and identified that public health care

- services needed to learn how to work with pharmacists and the primary health care sector. ¹⁷
- Between 2009 and 2016 in Canada, there were several events that saw pharmacists being progressively more sought after for their expertise in assessing and prescribing—the 2009 H1N1 pandemic influenza,¹⁸ the 2011 Slave Lake wildfires, the 2013 Calgary floods¹⁹ and the 2016 Fort McMurray wildfires.²⁰

What is apparent is that the pharmacist's role has evolved from logistics and drug supply to now include assessment and prescribing roles. During the Calgary floods and Fort McMurray wildfires, pharmacists were increasingly being sought after for their clinical expertise.²⁰ In the case of Fort McMurray, the Alberta Health Services' pharmacy leadership made the suggestion to their upper management for the utilization of pharmacist assessing and prescribing services (D. Van Haaften, personal communication, January 2020). Patients were being evacuated without their identification, money or medications, and pharmacists were requested to set up a medical area within the evacuation centers to provide a health care service to the displaced community. They assessed patients and prescribed medications—they did not fill prescriptions. Shortly thereafter, pharmacists were requested to join the field hospital set up by the military and asked to assess and triage patients. It was not only the displaced and disaster-affected individuals that pharmacists helped but also the volunteer firefighters who suffered from smoke inhalation or ran out of their medications.

Perhaps disasters are the stepping stone for the advancement to a full scope of practice for pharmacists within a country. In 2019, Watson et al.²¹ compared different countries' disaster

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DOI: 10.1177/1715163520916921

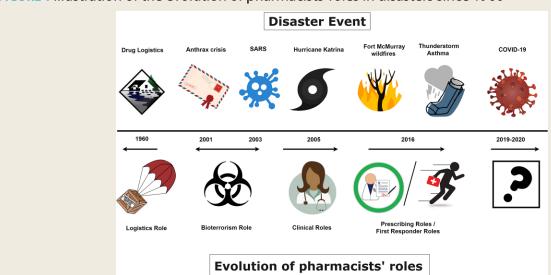


FIGURE 1 Illustration of the evolution of pharmacists' roles in disasters since 1960

KEY POINTS/RECOMMENDATIONS



- Although logistics are important, pharmacists are qualified clinicians in disasters and emergencies.
- Pharmacists should be recognized for the utilization of their full scope of practice (including patient assessment and prescribing) in a disaster or emergency.
- In emergency situations, pharmacists have demonstrated that they have an integral role in the emergency health response and recovery from disasters.
- Pharmacists need to be included in disaster planning and preparedness for there to be an appropriate health response in an emergency.
- Pharmacists cannot rely solely on large-scale disaster events to propel the advancement of their scope of practice.
- Pharmacy leadership should seek opportunities to offer and advocate for the full utilization of pharmacists' services.

pharmacy legislation, which revealed a correlation between the number of disasters experienced by a specific country's jurisdiction and the presence of disaster-specific pharmacy legislation (e.g., emergency supplies, vaccinations and pharmacy relocation). It is also possible that the study of pharmacists' responses during times of crises can provide insights into their adoption of a full scope of practice.

In 2018, an international Delphi study conducted with key stakeholders in disaster health and/or pharmacy identified 43

roles that pharmacists should be undertaking in a disaster.²² The study also states that greater awareness by the general public and other health care professionals is needed to further this advancement of pharmacists' roles during disasters.²² It is imperative that pharmacy organizations advocate for these pharmacists' roles and publicize the message that pharmacists are an essential service in emergencies. This message is important in order for the disaster health community to recognize pharmacists' contributions but also for pharmacists to understand their vital role as first responders in the community. Pharmacy organizations need to step up and advocate for the full utilization of pharmacists' services. They are also responsible for providing support and ongoing training opportunities for pharmacists and the pharmacy workforce to be prepared for disasters and emergencies.²²

One might suggest that these crises brought out the best in pharmacists and the best in pharmacy practice. They allowed us to show what we are capable of. Currently in Canada, many changes to scope of pharmacy practice have been made as a result of COVID-19. In Alberta, pharmacists have received access to a billing code that allows them to be reimbursed for assessing and screening potential COVID-19 patients.²³ In British Columbia, pharmacists have been empowered to assess and prescribe emergency supplies of patients' chronic disease medications and given refill authorization in an effort to decrease the burden on the health care system. 24,25 These enhanced emergency supply provisions have been echoed in Australia, with some states extending the disaster emergency supply arrangements during the pandemic.²⁶ We expect that the COVID-19 pandemic now upon us will demonstrate the value of pharmacists' roles in disasters even further.

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