

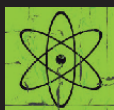
# DISASTER PREPAREDNESS

# *for* HEALTH CARE FACILITIES

*First Edition*



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## Foreword

You hold in your hands the first textbook on disaster preparedness conceived, designed, and written by first receivers and first responders to meet the needs of healthcare facilities. This book grew out of the concern held by those who will need to provide health care in disasters that our healthcare systems are not ready to cope with a major event.

It is a recurrent theme that the further away one is from the actual delivery of disaster care, the better prepared one perceives the system to be. At the extreme, recent correspondence from the Canadian Association of Emergency Physicians to the provincial health ministers across Canada voiced concern about the healthcare system's ability to respond to disaster. Uniformly, all health ministers in the provinces who responded (8 of 10) stated that their provinces were prepared.

Unfortunately, the reality at the front lines is not so rosy. Frontline providers have repeatedly expressed serious concerns about the ability of healthcare systems, and specifically healthcare facilities, to respond in a disaster.<sup>1-4</sup> Staff are inadequately trained despite the existence of competency lists and curricula.<sup>4,5</sup> US data show that there is a large amount of variability between regions and facilities.<sup>6</sup> Canadian data, while limited for reasons that will be expanded on further, also show that there are areas of strength and weakness and that there is both regional variability and variability in preparedness for specific types of events.

This discrepancy between high- and middle-level administration's perception of readiness and frontline caregivers' perception of a lack thereof stems from 3 key reasons. The first and simplest of these is the distance, both geographic and in terms of training and expertise, between the administrator and the individuals actually delivering the care in a disaster setting.

Second is the fact that, particularly in health care, disaster preparedness is an "orphan" entity. Healthcare professionals have extremely limited training in disaster preparedness,<sup>5,7</sup> disaster management experts have almost no expertise in health care, and there is no overarching authority that is able to bridge the gap between these two groups. This diffusion of responsibility exists at all levels, but reaches an extreme at the federal level. The Minister of Public Safety has the expertise and the tools for disaster response and the Minister of Health has significant expertise in healthcare issues, yet both of them are lacking in the expertise of the other.

The third reason is the absence of any formal assessment of healthcare facility disaster preparedness in Canada. This lack of formal, replicable, and evidence-based disaster preparedness assessment underpins all other problems in that if we do not measure our inabilities, we will not be able to remedy them.

One of the oft-quoted reasons for not having a disaster assessment tool is that disasters are so variable that it is impossible to design a uniform assessment tool for readiness. Although it is true that disasters may be variable, the *response* to disasters is far more uniform. Israeli hospitals, likely the world leaders in preparedness for dealing with disasters, have developed standard operating procedures that facilitate the management of mass casualty incidents. Not only do these procedures allow for an organized response to a disaster, they also allow for an ongoing process of quality improvement since there are standards against which to measure performance.<sup>8</sup>

Incidentally, the statement that there is a large variability in potential disasters leads one to question why hospitals do not routinely perform risk assessment to determine which disasters may befall them. Currently in Canada, there is no evidence that any formal risk assessment tool has been deployed across hospitals, despite the fact that such tools, specifically Canadian tools, do exist and are included in this textbook.

Another reason for the lack of formal assessment is the lack of a standard of care. This was alluded to earlier and stems from the misperception that each type of disaster requires its own unique plan and that a standard of care must be derived for each. The disaster literature has for years focused on an “all hazards” approach as opposed to individual plans. The “all hazards approach” requires a basic plan that is then adapted for specific events. This basic plan is the backbone of the hospital disaster response and should be measured against a standard of care.

The third reason for not performing formal readiness assessments is that, while the literature is replete with calls for the development of such a tool,<sup>9,11</sup> the perception is that nothing is available or what is available is not validated.<sup>12–14</sup> This perception is incorrect because tools, specifically Canadian tools, do exist for both risk and readiness assessment. With support from the Public Health Agency of Canada (PHAC), the Centre for Excellence in Emergency Preparedness (CEEP) has developed such tools and they too are included here.

The final reason that hospitals have not assessed their readiness is the most understandable. Faced with pressing and immediate issues such as hospital overcrowding and budget management, potential problems such as disasters are seen as deferrable concerns. This opinion exists despite the ability of disaster preparedness to help with overall efficiency. The irony is that, with our alternate level of care (ALC) statistics, our blocked emergency departments, and our overwhelmed pre-hospital services, the disaster is upon us already. We are blinded to it because it arrived with a whimper, not a bang.

Although the likelihood of a disaster occurring is small, the impact of a disaster can be extremely significant. First and foremost, there is a direct healthcare impact on the population, be it from mass trauma, an infectious agent, a chemical release, weather patterns, or other causes. Disasters can also have an impact on the ability of the hospital to function. As the workload increases, the staff themselves may become ill and fear within the healthcare community may grow. Finally, the reputation of an organization that responds poorly to disasters is tarnished for an extremely long period of time. Tragedies such as the Indian Ocean tsunami in 2004 or Hurricane Katrina in 2005, shown on 24/7 news channels, provide our “global village” world an eyewitness account of disaster management (or lack thereof).<sup>12</sup> Any mention of the Federal [U.S.] Emergency Management Agency (FEMA) today immediately brings to mind the response to Hurricane Katrina while all good works that FEMA had performed in the past are forgotten. Thus, beyond the immediate impact on the population, the hospital staff, and the hospital’s ability to function, the impact of a disaster on the public relations image of the hospital can be in and of itself disastrous and sustained for a very long time.

Standardizing approaches to surge management during disasters is the first step in quality improvement. Because disaster response is an organization-wide process, this improvement has an impact on the entire hospital. Processes that are discovered to be useful in expediting care in a disaster situation can easily find their way into the day-to-day function of the organization. If disaster is defined as an event that outstrips the organization's ability to deliver health care, preparedness is a method of "vaccination," raising the threshold not only in disaster periods but also in normal day-to-day function. Hospitals that function well before an event may have less need to invoke their disaster plan to begin with.

Preparing for disasters is a daunting task, not so much because of the depth of the issue but because of its breadth. It has been said that the way to eat an elephant is one bite at a time. The first two "bites" of this particular elephant are for hospitals to perform risk assessments and readiness assessments. Once these are done, it will be a far more manageable task to remedy the identified gaps. Until such time as these assessments are done, we are all at risk of being found unprepared when the disaster – whatever it may be – strikes. More so, it is incumbent on hospitals to take the initiative on this issue since it falls between the cracks of the health care and public safety systems, lacks clear ownership, and is often forgotten or deferred in the presence of more pressing issues such as hospital overcrowding and budget crunches. It is the sincere hope of the authors of this textbook that our contribution will help healthcare facilities in Canada and elsewhere face this challenge with success.

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# Acknowledgments

Many individuals were involved in the preparation of this textbook. Besides the invaluable expertise of each and every author, I would like to thank the following people for their contribution as reviewers for these textbook chapters.

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In addition to those people listed above, I would be remiss if I did not thank my Executive Assistant, Ms. Cynthia Bailey, without whose patience and perseverance these pages would ever come to light.

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