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# Ethics in Emergency Medicine

## MUST I RESPOND IF MY HEALTH IS AT RISK?

Kenneth V. Iserson, MD, MBA, FACEP, FAAEM

International Federation for Emergency Medicine and Department of Emergency Medicine, The University of Arizona, Tucson, Arizona
*Reprint Address:* Kenneth V. Iserson, MD, MBA, FACEP, FAAEM, Department of Emergency Medicine, The University of Arizona, 4930 N. Calle Faja, Tucson, AZ 85718

☐ **Abstract—Background: Widespread epidemics, pandemics, and other risk-prone disasters occur with disturbing regularity. When such events occur, how should, and will, clinicians respond? The moral backbone of medical professionals—a duty to put the needs of patients first—may be sorely tested. Discussion: It is incumbent on health care professionals to ask what we *must* do and what we *should* do if a dangerous health care situation threatens both ourselves and our community. Despite numerous medical ethical codes, nothing—either morally or legally—*requires* a response to risk-prone situations from civilian clinicians; it remains a personal decision. The most important questions are: What will encourage us to respond to these situations? And will we respond? These questions are necessary, not only for physicians and other direct health care providers, but also for vital health care system support personnel. Those who provide care in the face of perceived risk demonstrate heroic bravery, but the choice to do so has varied throughout history. To improve individual response rates, disaster planners and managers must communicate the risks clearly to *all* members of the health care system and help mitigate their risks by providing them with as much support and security as possible. Conclusions: The decision to remain in or to leave a risky health care situation will ultimately depend on the provider's own risk assessment and value system. If history is any guide, we can rest assured that most clinicians will choose to stay, following the heroic example established through the centuries and continuing today.** © **2018 Elsevier Inc. All rights reserved.**

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## INTRODUCTION

Disasters that pose risks to responding health care professionals occur with disturbing regularity. Influenza pandemics have occurred several times in each century since the Middle Ages, and three occurred during the 20th century: in 1918, 1957, and 1968. In the 21st century alone, aside from natural and man-made disasters, major emerging and reemerging infectious disease outbreaks, epidemics, and pandemics have included severe acute respiratory syndrome (SARS), chikungunya, Zika virus, cholera, H1N1, measles, Middle East respiratory syndrome coronavirus, and Ebola (1). In 2017, the World Health Organization determined that additional diseases posed a substantial risk of causing widespread public health disasters. These included arenaviral hemorrhagic fevers (e.g., Lassa fever), Crimean Congo hemorrhagic fever, filoviral diseases (e.g., Ebola and Marburg), Nipah and related henipaviral diseases, Rift Valley fever, and severe fever with thrombocytopenia syndrome (2). In their 2018 report, they added "Disease X," which represents a serious international epidemic caused by a pathogen currently unknown to cause human disease (3). Increased international travel and instability have increased the risk for infectious spread and exposure to nuclear, biological, and chemical weapons.

Seemingly mundane—because we have become inured to them—influenza epidemics strike nearly every year with devastating effect. Public health officials often fail to produce a highly efficacious influenza vaccine,

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with a vaccine effectiveness ranging from 10% (2004–2005) to 60% (2010–2011) between 2004 and 2018 (4). This leads to an overwhelming number of the sickest patients presenting to emergency departments (EDs), putting the health of physicians and ancillary staff at risk. We are on the cusp of developing a universal influenza vaccine that is effective against all flu strains (5,6). In the interim, officials are bracing for the next periodic flu pandemic, such as that of 1918–1919, which is estimated to have infected 500 million persons worldwide and killed 3% to 6% of the world's population (7).

When a similar disaster occurs posing personal risks to health care professionals, how should physicians respond to the catastrophe? The moral backbone of medical professionals—a duty to put the needs of patients first—may be tested as they weigh multiple factors to determine whether to stay and carry out their professional roles or to step back and decrease their personal risks.

Most disaster plans depend on physicians, nurses, support staff, and prehospital personnel to maintain the health care system's front line during crises. Yet planners cannot automatically assume that all health care workers will respond. Research suggests that although 80% or more of physicians and nurses might respond to mass casualty incidents, only about half would remain to work during an epidemic or radiological disaster or after a terrorist incident involving a chemical, biological, radiological, or nuclear agent (8–10). Workforce shortages in health care systems already stressed by increased patient care demands could lead to system failure (8). Response rates are further altered by an individual's race, sex, marital status, prior military service, specified role in the disaster plan, full-time or part-time status, and site of employment (11,12). Health care professionals with clinical, ED, or other acute care experience were more willing to report to and stay at work than those from other areas (12). Today, as deadly diseases devastate regions around the globe, each of us must ask what we *must* do and what we *should* do if an intractable epidemic threatens our community. Public officials, when planning for disasters, must factor in whether health care personnel will choose to stay and "fight" or to flee, and then must modify their own plans and behavior to ensure the maximum health care workforce.

## DISCUSSION

### *What Must We Do in the Face of Risky Situations?*

*Must* physicians and other health care personnel respond when they face personal risks? The 20th century saw health care personnel repeatedly face diseases from (initially) unknown agents. These included not only the deadly 1918 influenza pandemic, but also widespread polio, human immunodeficiency virus (HIV), SARS, and more localized outbreaks, including Legionnaires' disease and hantavirus. Yet, until the SARS virus struck Asia and then Canada in 2003 and the Ebola virus appeared in the United States in 2014, few practicing emergency physicians had to ask themselves what they would do if they were personally at risk. For all nonmilitary physicians, this had been a hypothetical problem, the purview of ethicists and historians. Today we know that this is an uncomfortable question for which each of us should have an answer.

Inspired by Thomas Percival, the American Medical Association's (AMA) first Code of Medical Ethics, published in 1847, addressed the issue of personal risk during epidemics: "When pestilence prevails, it is [physicians'] duty to face the danger, and continue their labors for the alleviation of suffering, even at the jeopardy of their own lives" (13). The AMA maintained that policy for nearly two centuries, stating as recently as 2001, "We, the members of the world community of physicians, solemnly commit ourselves to … apply our knowledge and skills when needed, though doing so may put us at risk" (14). More recently, they have retreated from that position, opining that "because of their commitment to care for the sick and injured, individual physicians have an obligation to provide urgent medical care during disasters. This ethical obligation holds even in the face of greater than usual risks to their own safety, health, or life. The physician workforce, however, is not an unlimited resource; therefore, when participating in disaster responses, physicians should balance immediate benefits to individual patients with ability to care for patients in the future" (15).

The American College of Emergency Physicians, meanwhile, has continued to advocate Percival's precept, stating in the 2017 *Code of Ethics for Emergency Physicians* that "*Courage* is the ability to carry out one's obligations despite personal risk or danger … Emergency physicians exhibit courage when they assume personal risk to provide steadfast care for all emergency patients, including those who are agitated, violent, infectious, and the like" (16).

Despite these ethical codes, nothing—either morally or legally—*requires* a response to risk-prone situations from civilian clinicians; it remains a personal decision.

### *What Should We Do in the Face of Risky Situations?*

When deciding what we *should* do in a risk-prone situation, each of us will prioritize our personal and professional values, those traits in ourselves that we consider to be our highest priorities and fundamental driving