Emergency Ethics

Public Health Preparedness and Response

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Vulnerable Populations in the Context of Public Health Emergency Preparedness Planning and Response

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Introduction

Theories of social justice differ in their fundamental theoretical commitments and their practical implications, but almost all but the most radically individualist of moral and political theories contain in their framework the idea that there are some prima facie individual and societal obligations to prevent or mitigate harm to others, at least when the cost of doing so is not unreasonable (Pogge, 2002). Perhaps even wider agreement exists regarding the obligation to prevent or mitigate harm to persons who are especially vulnerable to harms or injuries (Gostin & Powers, 2006).

Whether such obligations rest primarily with governments, particular individuals in social and professional roles, or nongovernmental organizations, most social justice theories agree also on some of the moral obligations of that role. To the extent that a central authority takes on the task on behalf of society, it must conduct itself according to principles of fair regard for the well-being and harm prevention of all its citizens in ways that recognize and respond to the actual vulnerabilities of some segments of the population (Daniels, 1993). More specifically, one concern of justice is to ensure fair distribution, not only of social benefits and opportunities, but also of burdens and risks.

Subpopulations who are at increased risk of preventable harms are due added consideration in the design and implementation of

social policies that deal with the impact of a natural disaster, pandemic, or human made emergency. These populations are also due added attention in execution of plans for disaster response. Surveys of disaster-related planning and guidance documents around the world reveal that public health authorities differ considerably in those they identify as especially vulnerable, as well as in the specificity of their plans to address the special needs of the vulnerable. Despite this, the special focus of justice on vulnerable populations has risen to the top of the agenda in many disaster preparedness planning circles (Bellagio Group, 2007*a*, 2007*b*; Uscher-Pines, Duggan, Garoon, Karron, & Faden, 2007).

This chapter examines four major issues. The first section focuses on the relevant notions of vulnerability and the related conceptions of societal duties toward vulnerable populations. Following that is a discussion on what those duties might involve in the way of practical decision and implementation, the relative stringency or priority of duties toward vulnerable populations, and how one might decide what to do when moral duties conflict. The third issue concerns the obligations to gather information, plan for, prevent, or mitigate harm from a disaster, and whether and to what extent these obligations differ in their priority and moral importance. Finally, we consider whether there are significant moral differences associated with different triggering events, such as natural disasters, terrorism, or pandemics.

Conceptions and Attributes of Vulnerability

Types of Loss

All living things are vulnerable to physical injury, disease, and death. Moreover, all sentient beings are vulnerable to pain and suffering. All creatures with any significant degree of complex mental activity are, in addition, subject to the prospect of psychological harms associated with the anticipation or experience of other kinds of losses. For example, fear, anxiety, regret, guilt, shame,

grief, confusion, or hopelessness might accompany the experience or anticipation of loss of life, health, economic security, possessions, loved ones, physical security, peace of mind, shelter, sense of place, or the expectations of ordinary life following a disaster. Public health policy planners must be attuned to vulnerabilities to losses of distinct kinds inasmuch as vulnerability must always be understood as some added or special risk for experiencing losses of a specific kind.

Moreover, vulnerabilities to losses of one kind rarely exist in a vacuum or apart from a constellation of vulnerabilities to losses of multiple kinds arising from any identifiable threat to some dimension of well-being. For example, it is difficult to imagine persons being vulnerable to loss of property and possessions without being vulnerable to all the economic and psychological consequences of homelessness and displacement. The ethically appropriate discharge of public health planning responsibilities, therefore, encompasses a duty to anticipate both the range of distinct types of loss that the subpopulations might experience and the overlapping causal mechanisms by which losses occasioned by a disaster are made greater and more difficult to mitigate because of the preexisting vulnerabilities of those subpopulations. The minimal expression of such a duty involves a responsibility to identify those particular populations who are at increased vulnerability to losses above and beyond the general population and to incorporate loss mitigation and prevention strategies appropriately tailored to those differences in vulnerability into disaster preparedness and response plans.

Risk of Loss

During a natural disaster or pandemic, everyone is vulnerable to the various kinds of health and other losses discussed previously, but the challenge may be more substantial when considering subgroups. Certain socially situated groups, for a number of reasons, have a different risk profile than most other members of the community.

First, certain groups might face a greater probability of experiencing a harm or loss of a specific kind. They might have a medical condition making their adverse health outcomes worse or a limitation of mobility that reduces their ability to takes steps to mitigate the impact of a disaster.

Second, some groups may be more likely to experience a greater magnitude of a particular kind of loss. For example, they may be geographically nearer to the greatest impact of a natural disaster, such as a flood, or an industrial event, such as an accident or terrorist attack.

Third, groups with multiple vulnerabilities face a greater aggregate magnitude of loss in well-being because the combined effect of losses of various kinds is the likely consequence of a cascade of causally related losses. Those who are poor, lack access to transportation, are in poor health, and have inadequate housing are more vulnerable to multiple losses that can magnify the adverse impact on any one aspect of their overall well-being. The cumulative effect of such cascading losses can be far more devastating than any single loss to persons who do not face multiple vulnerabilities. For example, an industrial accident or natural disaster that destroys a home is bad enough for healthy persons, but for those who are already medically vulnerable, the loss of adequate shelter can expose them to new health threats that add to existing comorbidities. If persons who are medically vulnerable are located in rural or sparsely populated areas, geographic inaccessibility to timely medical care can make such an assault on health far greater than it would otherwise have been if all the other contributing factors to poor health outcomes not been present and if they had easier access to timely medical care.

In short, the potential impact of a disaster on some population groups may be far greater than on others, and public health planners should work to avoid unjust burdens on those who, by virtue of increased vulnerabilities, face greater than the population-average level of risk.

The experience of the poorest citizens of New Orleans during Hurricane Katrina provides a readily understandable example. The

devastation of housing stock and the attendant dislocation affected everyone in the path of the storm because of the flooding produced by the break in the levees, but, for the poor, both the probability and magnitude of harm and the cascade of other harms were greater (Atkins & Moy, 2005). The poor in New Orleans, like the poor elsewhere, tend to live on property that is closest to sources of hazard. In New Orleans, their increased probability of loss from the levee break was a consequence of living on low-elevation land, where the probability of flooding would be highest and the magnitude of destruction the greatest.

The special vulnerability of the poor to greater risk of harm is not limited to natural disasters. The poor tend to live closer to other sources of hazard, such as chemical factories, power plants, train tracks and freight storage depots, gas and fuel processor plants, and landfill disposal sites (White, 1998). If things go badly, whether as a consequence of natural disasters such as a hurricane, large-scale accidents, or terrorist attacks at industrial sites, the very fact of their close proximity exposes the poor to a greater probability of a greater degree of harm than their more distant neighbors can expect.

Although loss of housing stock and dislocation adversely affect anyone in the path of a storm such as Katrina, being poor usually means being without adequate insurance to rebuild or replace damaged housing, and being poor means lacking ready financial resources or credit to maintain the necessities of life until assistance from government or relief agencies becomes available. As a result, the ability to recoup from disaster is far less for the poor than for more prosperous homeowners. Loss of housing stock, especially the loss of building structures within a whole community, usually means a greater likelihood that the source of employment will disappear as well. If there are no savings or insurance to aid displaced families in rebuilding their lives, the loss of a job is doubly devastating. Therefore, whereas losses faced by vulnerable populations might be the same kind as those faced by others, the impact on those who are more vulnerable by virtue of their economic disadvantage is both far greater and readily predictable.

Socially Situated Vulnerability Versus Natural Vulnerability

Socioeconomic disadvantage in all its familiar manifestations is a form of socially situated disadvantage. Vulnerability of the sort described in the example of Hurricane Katrina, for example, is not a consequence of some innate or unalterable natural characteristic of the persons disproportionately adversely affected by disaster. Such vulnerabilities are largely a function of the contingent situation of certain groups under alterable social and economic arrangements.

In contrast, increased vulnerability to a pathogen may be mediated by genetic differences that predispose some persons to earlier onset of disease, a more robust form of infection, poorer prognosis, more anticipated medical complications or comorbidities, or less capacity to respond positively to available therapeutic options. Such vulnerabilities may be thought of as natural vulnerabilities; that is, the increased risk, either in probability or magnitude of harm, may be a function primarily of some natural biological fact about the affected persons.

The purpose of this contrast is not to draw sharp distinctions between natural and socially produced vulnerabilities but rather to emphasize that increased vulnerabilities may often be a joint function of natural factors and contingent social arrangements such as economic disadvantage. Because the two interact, such possibilities for interaction should be recognized in the planning process. For example, decreased responsiveness to available therapies is itself a function of both biology and of societal investment patterns in pharmacological agents of one kind rather than another. This is also true of matters of prognosis (e.g., when genetic predisposition accounts for the first component of increased vulnerability but lack of access to timely and appropriate medical care or public policies that reduce the opportunity of some groups to avoid exposure continue the cycle).

Elevated Baseline Vulnerability

Regardless of whether vulnerabilities are primarily of natural or biological origin, or whether they arise from some combination of socially situational disadvantage and predisposing biological factors, they translate into an elevated baseline vulnerability. In principle, at least, some groups who are vulnerable to various types of losses occasioned by disasters can be identified in advance because of known factors that contribute to elevated baseline risk. This is not to deny the need for careful reflection and exercise of the imagination for identifying groups with elevated baseline vulnerabilities; however, some sources of vulnerability are readily predictable and thus more readily amenable to being accounted for in the planning process. Predictable elevated baseline vulnerabilities include economic status, geographic proximity to known hazards, previously identified genetic predisposition, ongoing environmental hazard exposure, and physical or mental disabilities (Shrader-Frechett, 2002).

In contrast, some persons are more vulnerable to hazards that might not of themselves be readily predictable as sources of increased risk based on known preexisting group characteristics. Victims of terrorist acts, for example, are not always an easily identifiable group. However much planning and thought might be given to possible terrorist attack sites, the many imaginable sites that a terrorist might choose still present a large impediment to accurate prediction. Likewise, neither the particular instrument of terror nor its hazards lend themselves to complete and comprehensive planning to protect those exposed. Nonetheless, it is known that firefighters and police, recovery workers, health care providers, and volunteer responders will face special risks in the event of a terrorist attack. These will likely be in the form of environmental hazards ranging from pathogens to radiation to respiratory particulate matter. Even then, health officials may not have an adequate epidemiologic basis for knowing the long-term vulnerabilities of those exposed.

The implication for persons involved in both the planning and response stage is that they have a duty to anticipate those who, by virtue of some group characteristics, are at increased vulnerability for losses of various kinds, as well as a duty after the fact to monitor and attend to the range of potential long-term vulnerabilities for which any reasonable effort at anticipation may still fail to identify in advance.

Cascading Losses and Fine-Grained Variations in Vulnerability

It bears repeating that vulnerability to a loss of one kind rarely, if ever, travels alone. The additional vulnerability of certain groups may be a function of the fact that vulnerabilities that arise with respect to one aspect of their members' individual well-being not only magnify the probability and magnitude of potential harm (e.g., to physical health), but can also create additional vulnerabilities in the process. Increased levels of vulnerability to health or economic harm, like social disadvantages generally, interact, compound, and perpetuate one another. Being poor is a risk factor for environmentally mediated and medically unattended ill health, lack of cognitive development at crucial stages of human maturation, and increased vulnerability to violence and lack of physical security (Ben-Shlomo & Kuth, 2002). Being sick or having cognitive disabilities is a risk factor for being poor, being forgotten in the public health planning process, being more difficult to incorporate adequately in any rescue or disaster response plan, and living in substandard or dangerous housing conditions (Kawachi, Kennedy, & Wilkinson, 1999). Moreover, being sick, being poor, or having cognitive disabilities does not establish a one-size-fits-all standard of vulnerability for anyone who falls within the relevant group label. Being poor where agricultural abundance is the norm makes one less vulnerable to loss than being poor where everyone lives close to the edge of starvation.

Being poor is less of a risk factor for sustaining unrecoverable losses when a system of medical care is accessible and is independent

of individual ability to pay. Being poor matters most when many of the goods necessary for life and for survival of a disaster are made available only on the basis of the ability to pay. Being sick similarly admits of variations in the degree of vulnerability to other harms, including loss of economic security and limitations on mobility.

Availability of public assistance programs or accessible public transportation not only changes the standard of living for the sick in the course of their ordinary lives but also provides some additional hedge or buffer against a cascade of losses when disasters affect the population at large.

Those things that can be changed in the equation of how much unjust, disproportionate risk and burden of harm will fall on certain predictable subpopulations are the background social, economic, and infrastructural conditions that, if configured differently, would have reduced the vulnerability some face in a disaster affecting a community. Disadvantage takes many forms and arises out of lack of well-being or a secure means to the pursuit of well-being in its many dimensions.

When multiple dimensions of well-being are adversely affected through multiple causal pathways, and especially when those so affected have little hope of improving their situation, there arise the makings of systematic disadvantage. Those who are systematically disadvantaged not only live in conditions of diminished well-being but also remain permanently at risk of a worsening of their condition.

Those who command a proportionately greater share of the community's economic resources are better off, not simply in virtue of having a higher standard of living, but also in having disproportionate influence in public affairs, augmented bargaining power in private transactions, and the full measure of respect and esteem of others. Indeed, the worst off may have little option but to do the hardest work, with the greatest threat to health and safety, at the least convenient times, with the greatest risk of ruin by a turn of bad fortune, and for wages that can never raise them above their current state (Powers & Faden, 2006).

The challenge in planning so that unfair or unjust risks and burdens do not fall disproportionately heavily on some groups

is to study and appreciate the complex causal pathways to harm and consider within-group variations. Economic disadvantage is one source of added vulnerability, perhaps numerically the largest source of vulnerability that poses challenges to public health authorities. However, many more such groups exist, including those portions of the population with various forms of physical and intellectual disabilities.

An Example: Persons with Cognitive Disabilities

Persons with intellectual disabilities or other medical conditions that interfere or limit ordinary cognitive functioning have vulnerabilities that expose them to a greater probability of harm and to harms of potential greater magnitude. Persons with certain forms of intellectual disability may lack the skills necessary to fully apprehend, process, and respond appropriately to warnings of impending hazards such as pandemics or natural disasters. The usual burdens faced by the general population in time of crisis are thus magnified among those who navigate the challenges of daily life more precariously, and often only well enough with the assistance of others. These differences present a need for planners to address specific ways that a disaster might affect the cognitively impaired (National Council on Disability, 2005).

The usual methods by which public health warnings are communicated may not reach this particular population; thus, they might remain in the path of a storm or flood when others have left before the level of risk had risen. During a pandemic, they might expose themselves to vectors of disease and pathogens when others have been made aware of the need to modify their daily routines in order to protect themselves.

In the case of more severe cognitive disabilities, a substantial percentage of affected persons may be in living arrangements where someone else is charged with making routine decisions about all aspects of their well-being. This arrangement brings its own public health challenges in an emergency when there is a need to mobilize and coordinate responses for large groups of persons

with limited understanding and capacity to make voluntary decisions for themselves.

Persons with more moderate intellectual disabilities represent a quite different vulnerability profile for public health officials to take into account. Those with moderate cognitive disabilities may be in quasi-independent living arrangements, and whereas they might be able to function quite well within a regular daily routine, they may lack the skills necessary to cope with and adjust to novel and unfamiliar contexts. Some may not get timely information at all because their regimented routines make coping with daily life more tractable. Others may be more easily disoriented by situations that are manifestly difficult for anyone and, as a result, may feel unable to make quick decisions or take the necessary steps to comply with directives about matters such as evacuation or protection from a pathogen. Like persons without such cognitive limitations, they may feel the need to reconnect with others or forgo the pursuit of their own safety for the sake of family members and close associates.

In such cases, what distinguishes persons with moderate cognitive disabilities from those with a more normal level of functioning is often a greater degree of dependency and attachment as a defining feature of their lives. Dependency of this heightened sort can make the public health task of efficient response to mass health threats more difficult to manage. Indeed, the psychological dimension of any public health emergency can be as great as the threat to physical health, and the effects can be long-lasting and profound.

In addition, many of the challenges in dealing with persons with long-term cognitive disabilities apply to any population that is sick, dependent, unable to exercise a substantial measure of independent diligence for themselves, and situated in an institutional setting. One possible way to make the response tasks more tractable might be to geographically segregate some populations so that a more efficient operation can be mounted and one single, large-scale effort in identifying and responding to persons with cognitive disabilities would replace multiple efforts. However, any

reasonable public health approach will recognize two striking failings in this way of proceeding.

First, physical health is not the only dimension of well-being that must be considered in public health policy planning. Social segregation, even if motivated by a desire for the health of those who lack the capacities to care adequately for all aspects of their own well-being, has proved to be a myopic focus on one dimension of well-being to the exclusion of others. The desire to live among others, to develop and sustain bonds of attachment with family members and others, to lead self-determining lives as far as their cognitive capacities will permit, and to participate in all the other social arrangements that add dignity and meaning to a life are wanted just as much by persons with intellectual disabilities as anyone else. The old, the sick, the frail, and those with reduced levels of cognitive functioning cannot be warehoused or shunted away simply because it solves a management problem if and when a disaster strikes.

Second, disaster planning and response are public health goals nested within a larger set of goals that necessarily take account of what is necessary to live a flourishing life under normal conditions of everyday life, and not just what is necessary for the best public health outcome in a disaster. Those things that serve public health goals well in normal times serve public health goals well in emergencies. Solid health care and public health infrastructure, forms of social insurance that prevent bad events from cascading into even worse outcomes, transportation design that facilitates mobility for all persons, and proper management of environmental hazards and their proximity to human habitation all serve the goals of wise public health policy in ordinary and extraordinary times.

Varieties of Vulnerability

Perhaps no complete taxonomy of vulnerabilities is possible; however, some useful distinctions can serve as markers for the kinds of things that public health planners and responders can take into account when thinking of their obligations to

vulnerable subpopulations. These include distinctions among the elements of risk, among types of losses, among threats or sources of harm and vulnerability to harm to some aspect of well-being, together with their causally interactive structure. The International Federation of Red Cross and Red Crescent Societies defines vulnerable populations as "those at greatest risk from situations that threaten their survival or their capacity to live with a minimum of economic and social security and human dignity" (Jenson, 1997, p. 58). In many societies, women, children, minorities, refugees, the poor, and persons with disabilities are familiar examples of those having elevated baseline vulnerability to losses involving multiple aspects of their well-being, which, in turn, are likely to be realized through overlapping causal vectors.

Disadvantage, even systematic disadvantage, however, is no perfect proxy for vulnerability. There will be those for whom life seems to be going well enough, but who can, in a moment, become a new group marked by heightened vulnerability as a result of some unanticipated event.

The Moral Relevance of Vulnerability

Thus far, it has been claimed, first, that justice requires some special attention to those who are especially vulnerable to the losses occasioned by disasters and, second, that most theories of justice converge in that judgment. The following is an exploration of the question of possible justifications for such duties and how public health authorities should understand their aim with respect to persons identified as having a higher degree of vulnerability.

Prioritarian Justice: Priority to the Worst-Off

Some prominent contemporary theories of justice argue that the central requirement of justice is a societal duty to give priority to the worst off in any context that requires some distributive choice

among persons when not all who stand to be benefited can be benefited, given resource constraints (Parfit, 1998). In some versions of this "prioritarian" conception of justice, the worst-off class of persons is defined by their distributive share of wealth and income (Rawls, 1971). So, by definition, it is the poor who receive priority.

Other theorists have generalized the prioritarian account of the job of justice to say that there are other ways in which the worst-off might be denominated, and, accordingly, whoever the worst off are according to some plausible alternative definition, it is to them that the most urgent obligations of justice are due. The needs of the worst off trump the similar needs of the best off simply because the worst off already have unfairly lower levels of well-being. Examples of extended prioritarian views abound. Children should get priority over the old because they by definition have had fewer opportunities for the goods that come with longevity. The sickest should get the scarce drug because their needs are most urgent or their suffering the greatest.

Just as prioritarian alternatives are limitless (Brock, 2002; Lockwood, 1988), so, too, are the practical and theoretical issues raised by adopting them as policy guides. One problem is the choice among prioritarian definitions. How do we adjudicate the issue of who is in fact the worst off so that that title earns them the claim for priority receipt of scarce resources. In the context of disaster planning and response, many different subpopulations have a plausible claim to be considered the worst off. However, few think, for example, that whatever prima facie arguments exist for protecting and rescuing children, they should lead to adopting a strict algorithm of doing so categorically at the expense of the old. At best, the prioritarian insight elucidates one important consideration in thinking about what justice requires. A counter argument against any temptation to apply the prioritarian principle mechanically is one that holds that citizens or residents of any political association have a right to some sort of equal concern and respect in the creation of state policies or a kind of claim for "moral equal protection" (Harris, 1988; Powers & Faden, 2002).

A further problem for the prioritarian argument is the fact that giving priority to the worst off—for example, the sickest, the poorest, the youngest, the disabled—is an essentially backward-looking principle of justice. It assumes that the job of justice is to remedy or smooth out the inequalities of the past, even if doing so means that the public health aspiration of benefiting more people is thereby undermined. For example, if we only treat the sickest; rescue those who are hardest to reach; protect those whose personal characteristics make them the hardest, most time-consuming to protect, we risk not being able to treat more who will live if given a scarce drug in a pandemic or rescue those who are healthy enough to save others and survive beyond the point of disaster (see the Red Cross definition of vulnerable populations). The prioritarian argument in its most extreme form might mean pouring an unlimited amount of scarce resources into policies and activities for which little or no long-term gains in health and longevity or other measures of well-being can be expected. Regardless of which priority to the worst-off might be considered morally relevant, it has limits and may be superseded either by resource efficiency considerations or a parallel commitment to something akin to the moral equal protection principle (described in the next section).

A final problem with the mechanical application of the prioritarian logic to decision-making in disaster planning and response is the fact that, however a decision is made as to who qualifies as members of the worst-off group, it is a rough and imperfect proxy for thinking about who are the most vulnerable. Vulnerability is relative to many factors, including threats to well-being born of the disaster event itself and more remotely linked personal factors such as economic class, disability, or minority status. Nevertheless, this context dependency should not ignore the often predictable association between increased vulnerability in a disaster and the preexisting patterns of disadvantage that make prospects for survival and well-being markedly poorer for some than others. To ignore this association would be to fail to learn any lessons from Hurricane Katrina.

Moral Equal Protection

The moral equal protection argument is based on the concern that strict priority to the worst off is suspect as a principle of fair public policy when the implications are a commitment to reducing the level of resources available to all for the sake of some. The problem is more than gross inefficiency. Even if following such a principle does not bankrupt or vastly outstrip available resources, it would be incompatible with some bedrock conception of moral equality, equal dignity, or right to equal concern and respect by the government of a society. On the other hand, the underlying intuition of the moral equal protection claim seems fundamentally right, but, like the core insight of the prioritarian family of justice theories, it does not seem to offer the final word on what justice demands with respect to those who are at baseline more vulnerable because of existing patterns of systematic disadvantage.

An added measure of attention to the special needs or risks of the various groups believed to be especially vulnerable in disasters might be argued for on grounds other than the prioritarians' desire to smooth out and compensate for past inequalities. Instead of thinking that the job of justice is the backward-looking task of pursuing strict equality of outcomes—such as health, wealth, or longevity—a prospective aspiration of justice might be to ensure that all persons can go forward from a disaster without spiraling downward irretrievably into a web of densely woven patterns of systematic disadvantage.

The dominant moral end of this nonprioritarian argument, then, is not compensation for the past, but reduction of those pervasive forces that shape the life prospects of some segments of society so adversely that the bad consequences that others can escape more readily can only be escaped by heroic effort and sheer good luck. This prospective surveillance of patterns of systematic disadvantage and heightened sensitivity to increased baseline vulnerabilities of certain subpopulations thus seems a better fit with the insights of the moral equal protection argument.

The end, thus conceived, is not special treatment or special benefit simply because they have fared worse than others in the past, but a governmental response that is calibrated to the demands of a genuine commitment to moral equality. That commitment is to the prospective removal of impediments that contribute to systematic disadvantage and heightened vulnerability not experienced by the rest of society. It would not single some out for added benefit in order to compensate for past inequalities; it would only ensure that none, as a consequence of a disaster event, is left in a position in which it is virtually guaranteed that an already bad situation is made both worse and almost inescapable.

Equality of Prospects or Status Quo?

The question remains regarding the role of public health with respect to vulnerable populations; that is, whether the aim of public health, even as it has been rephrased, is the elimination of systematic disadvantage, which would be a robust guarantee of comparable capacity to move forward beyond a disaster (or avoid one). Alternatively, is the aim better stated as something more modest; for example, to make all persons "whole" or restore everyone to the previous status quo, however much that pre-event condition might differ among persons or groups?

Endorsing the latter alternative implies that there is no obligation for public health or public planners in either the design or execution of disaster responses to have any impact in realizing the ends of a broader aspiration of social justice. Victims of disaster, for example, would be left with whatever access to health care they had prior to the disaster even if the added negative impact on health left them in a condition of far greater disadvantage.

The appeal of the status quo principle lies with the thought that there is something moral in an argument that puts the task of justice in this unusual context; that is, doing what public health officials would not be deputized to do in ordinary times. The logic of such a position, however, poses a fundamental question. It supposes that the end of public health is largely determined by its

mission to do good and avoid some harms to the general population without any serious attention to the distributive aspects of its mission.

Although some public health theorists might accept such a conclusion as unfortunate but not unjust, a substantial portion of public health theorists and practitioners would not endorse the narrowness of that vision. By contrast, the vast body of literature on health disparities and justice-based arguments for public health efforts to reduce those disparities provides a near perfect fit with the claim made herein: that public health in ordinary times, as well as in times of disaster and catastrophe, is equally concerned with the distribution of health and other disparities in well-being as it is with a simple maximization of aggregate public health. These are large debates not resolvable here. However, the existence of alternative ways of framing the ends of public health in this kind of context illustrates the extent to which the way that priorities are set in disaster planning and response will depend on some fundamental moral commitments that are not yet resolved in public policy circles.

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