PANDEMIC PREPAREDNESS

THE NEED FOR A PUBLIC HEALTH

– NOT A LAW ENFORCEMENT/NATIONAL SECURITY–

APPROACH

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ACLU
AMERICAN CIVIL LIBERTIES UNION

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The spread of a new, deadly strain of avian influenza has raised fears of a potential human pandemic. While the virus is not easily transmissible to humans, were it to mutate to be more highly contagious to or between humans—a possiblity whose probability is unknown—an influenza pandemic could occur.

Government agencies have an essential role to play in helping to prevent and mitigate epidemics. Unfortunately, in recent years, our government's approach to preparing the nation for a possible influenza pandemic has been highly misguided. Too often, policymakers are resorting to law enforcement and national security-oriented measures that not only suppress individual rights unnecessarily, but have proven to be ineffective in stopping the spread of disease and saving lives.

The following report examines the relationship between civil liberties and public health in contemporary U.S. pandemic planning and makes a series of recommendations for developing a more effective, civil liberties-friendly approach.

Conflating Public Health with National Security and Law Enforcement

Rather than focusing on well-established measures for protecting the lives and health of Americans, policymakers have recently embraced an approach that views public health policy through the prism of national security and law enforcement. This model assumes that we must "trade liberty for security." As a result, instead of helping individuals and communities through education and provision of health care, today's pandemic prevention focuses on taking aggressive, coercive actions against those who are sick. People, rather than the disease, become the enemy.

Lessons from History

American history contains vivid reminders that grafting the values of law enforcement and national security onto public health is both ineffective and dangerous. Too often, fears aroused by disease and epidemics have justified abuses of state power. Highly discriminatory and forcible vaccination and quarantine measures adopted in response to outbreaks of the plague and smallpox over the past century have consistently accelerated rather than slowed the spread of disease, while fomenting public distrust and, in some cases, riots.

The lessons from history should be kept in mind whenever we are told by government officials that "tough," liberty-limiting actions are needed to protect us from dangerous diseases. Specifically:

- Coercion and brute force are rarely necessary. In fact they are generally counterproductive—they gratuitously breed public distrust and encourage the people who are most in need of care to evade public health authorities.

- On the other hand, effective, preventive strategies that rely on voluntary participation do work. Simply put, people do not *want* to contract smallpox, influenza or other dangerous diseases. They *want* positive government help in avoiding and treating disease. As long as public officials are working to help people rather than to punish them, people are likely to engage willingly in any and all efforts to keep their families and communities healthy.

- Minorities and other socially disadvantaged populations tend to bear the brunt of tough public health measures.

The Problem with Post-9/11 Pandemic Plans

Current pandemic planning policies fail to heed history's lessons. Since 9/11, the Bush Administration has adopted an all-hazards, one-size-fits-all approach to disaster planning. By assuming that the same preparedness model can be applied to any kind of disaster —whether biological, chemical, explosive, natural or nuclear—the all-hazards approach fails to take into account essential specifics of the nature of the virus or bacteria, how it is transmitted, and whether infection can be prevented or treated. Following this flawed logic, several state-based proposals have sought to address any "public health emergency," ignored effective steps that states could take to mitigate an epidemic, such as reinvigorating their public health infrastructure, and instead resorted to punitive, police-state tactics, such as forced examinations, vaccination and treatment, and criminal sanctions for those individuals who did not follow the rules.

Specific pandemic flu plans have also been adopted by the federal government and nearly every state and locality. The plans are poorly coordinated and dangerously counterproductive. By assuming the "worst case" scenario, all of the plans rely heavily on a punitive approach and emphasize extreme measures such as quarantine and forced treatment. For example, the U.S. Department of Health and Human Service's *Pandemic Influenza Plan* posits a "containment strategy" that calls for massive uses of government force, for example to ban public gatherings, isolate symptomatic individuals, restrict the movement of individuals, or compel vaccination or treatment.

Toward a New Paradigm for Pandemic Preparedness

This report calls for a new paradigm for pandemic preparedness based on the following general principles:

1. **Health—***The goal of preparing for a pandemic is to protect the lives and health of all people in America, not law enforcement or national security.*
2. **Justice—***Preparation for a potential pandemic (or any disaster) should ensure a fair distribution of the benefits and burdens of precautions and responses and equal respect for the dignity and autonomy of each individual.*
3. **Transparency—***Pandemic preparedness requires transparent communication of accurate information among all levels of government and the public in order to warrant public trust.*
4. **Accountability—***Everyone, including private individuals and organizations and government agencies and officials, should be accountable for their actions before, during and after an emergency.*

In addition, a number of specific recommendations are made for a sounder approach to pandemic preparedness that protects health while safeguarding liberty, privacy and democracy. These include the following:

- Stockpiling and ensuring fair and efficient distribution and rationing of vaccines and medication;
- Emphasizing community engagement rather than individual responsibility;
- Protecting minorities and socially disadvantaged individuals from discriminatory rationing schemes for vaccination and treatment or from bearing the burden of coercive health measures;
- Relying wherever possible on voluntary social distancing measures rather than mandatory quarantines;
- Providing counsel and procedural protections to those individuals proposed for detention or travel restrictions;
- Protecting individual privacy in disease surveillance and investigation; and
- Ensuring that public health actors remain accountable for their actions in accordance with the law.

The threat of a new pandemic will never subside. But the notion that we need to "trade liberty for security" is misguided and dangerous. Public health concerns cannot be addressed with law enforcement or national security tools. If we allow the fear associated with a potential outbreak to justify the suspension of liberties in the name of public health, we risk not only undermining our fundamental rights, but alienating the very communities and individuals that are in need of help and thereby fomenting the spread of disease.

Maintaining fundamental freedoms is essential for encouraging public trust and cooperation. If our public agencies work hand in hand with communities to provide them with a healthy environment, access to care, and a means for protecting their families, rather than treating them as the enemy, we will be far better prepared for a potential outbreak.

INTRODUCTION

The spread of a new, deadly strain of avian influenza (H5N1), has raised fears of a potential human pandemic. This highly pathogenic and fast-mutating virus has already spread around the world, killing tens of millions of birds. Hundreds of millions more have been slaughtered in an attempt to limit the virus' spread. While the virus is not easily transmissible to humans, human cases and deaths have occurred, primarily among people in close contact with infected birds.[1] If the virus were to mutate to be more highly contagious to or between humans—a possibility whose probability is unknown—an influenza pandemic could occur.

In the last century, three influenza pandemics have struck. The 1918-1919 outbreak was the most lethal human pandemic since the Black Death in the Middle Ages. This extremely infectious strain claimed the lives of an estimated 50-100 million people worldwide, many of whom were young adults and otherwise healthy.

Communicable diseases are, by their nature, public harms. While individuals can take some measures to reduce their risk of infection, their efforts cannot fully succeed, nor can a community's risk be significantly reduced, without concerted action. Therefore, there is a significant and appropriate role for the government in pandemic preparedness and mitigation.

Unfortunately, many policymakers today believe that protecting public health requires suppressing individual rights. President Bush's first suggestion to contain a bird flu pandemic was to call in the military to quarantine large sections of the United States.[2]

The notion that we must "trade liberty for security" is both false and dangerous. It is false because coercive actions are seldom conducive to public health protection. It is dangerous because it provides a never-ending justification for the suppression of civil liberties while failing to safeguard public health.

Public health is not a law enforcement or national security problem.

This report examines why that is so. It looks at the relationship between civil liberties and public health in contemporary U.S. pandemic planning. Part One reviews this relationship in a historical context, examining in particular the disastrous consequences of public health policies built around a vision of sick people as the enemy. Part Two summarizes post-9/11 plans intended to protect the nation against a possible influenza epidemic and how these plans rely upon the false premise that public health is a law enforcement or national security problem that can be solved by limiting the rights and liberties of affected individuals. Part Three provides a series of recommendations for an improved paradigm for pandemic preparedness—one that protects both public health and civil liberties.

I. Historical Examples of Responses to Disease Epidemics

For millennia, governments have sought to protect their populations from epidemics. Frequently that response was positive, aimed at establishing an environment in which people could be healthy. Thus in the nineteenth century, cities prevented cholera by instituting sanitary measures and providing their residents with clean water. Later, governments provided vaccines and anti-toxins, improved urban housing, and regulated the safety of the food supply. These public health measures made an enormous difference, dramatically increasing life expectancies.

Not all public health interventions have been benign or beneficial, however. Too often, fears aroused by disease and epidemics have encouraged abuses of state power. Atrocities, large and small, have been committed in the name of protecting the public's health.

The Plague in San Francisco

In March 1900, a city health officer in San Francisco autopsied a deceased Chinese man and found bacteria that were suspected to cause Bubonic Plague. In response, health officials established a quarantine around Chinatown and forcibly removed whites from the affected area. Later, officials required people of Chinese ancestry to be vaccinated with a dangerous experimental vaccine before traveling. When a federal court correctly found that measure unconstitutional,[3] officials responded by quarantining Chinatown anew, drawing a contorted map that included only the homes and businesses of Chinese-Americans. The federal court also found that action unconstitutional.[4] Not only did the quarantine violate the Equal Protection Clause, the court found, but also, by confining everyone—healthy or sick—together, it was more likely to spread disease than to contain it.

Importantly, the next time plague reappeared, officials worked with the Chinese-American community to develop an effective preventive strategy, using the new understanding that plague was spread by fleas. That strategy emphasized eradicating rodents and cleaning up the neighborhood. The work took time and effort, but it halted the epidemic.

Smallpox in American Cities:

Smallpox may be considered a "democratic epidemic,"[5] because individuals of all classes were vulnerable to its devastation. But the public health response to smallpox has not always been democratic. Public health authorities have often viewed immigrants and poor people as harbingers of disease—as ignorant and dangerous people whose liberty had to be restrained for the common goal of fighting smallpox. In1894, the City of Milwaukee responded to a smallpox epidemic by forcibly moving immigrants and poorer residents to a quarantine hospital.[6] The result was distrust and riot. The epidemic was not contained.

Likewise, when smallpox arrived in Boston in 1902, health officials, accompanied by police officers, forcibly vaccinated immigrants and African Americans.[7] Although the Supreme Court later upheld the authority of a city to fine individuals who refused vaccination during an epidemic,[8] the Court never approved forcibly vaccinating people.

In contrast, New York City relied on a different approach in 1947, one that viewed the public as the client rather than the enemy of public health. When smallpox reappeared in the city after a long absence, the city educated the public about the problem and instituted a massive *voluntary* vaccination campaign. Not surprisingly, no coercion was needed. Provided with information about the need for and benefits of vaccination, and reassurance that the city was helping rather than attacking them, the citizens of the New York turned out en masse for one of the world's largest voluntary vaccination campaigns. The campaign was successful, and the epidemic was quashed before it had a chance to spread broadly in the city or beyond.

II. THE LESSON: LAW ENFORCEMENT IS THE WRONG TOOL FOR THE JOB

Lessons Forgotten

Unfortunately, past lessons appear to have been forgotten. In the post-9/11 climate, public health policy has increasingly been viewed through the prism of, and indeed as a part of, law enforcement and national security. Rather than focusing on how government can work *with* individuals and their communities to be healthy, public health policymakers now often emphasize the need to take tough, coercive actions *against* the very people they are charged to help. This approach not only targets people as the enemy instead of the disease, but also encourages health officials to believe that government cannot do much to help people in an epidemic. Little thought is therefore given to what society can and should do to help people prevent and mitigate epidemics. In effect, individuals are viewed as personally responsible for the spread of illness as well as for their own care.

This law enforcement/national security strategy shifts the focus of preparedness from preventing and mitigating an emergency to punishing people who fail to follow orders and stay healthy.

While there have been and probably always will be a few people with contagious diseases who, unwittingly or deliberately, behave in ways that expose others to infection, existing state laws provide health officials with the tools they need to respond to such situations, for example, by confining such persons to hospitals. Such cases, however, are the exceptions to the rule. Americans generally do not want to spread disease to others and are generally capable of controlling their behavior to avoid infecting others. However, the law enforcement/national security approach converts the exception into the rule by treating everyone in the general population as a potential threat who warrants coercive treatment.

Examples of the Push to Expand Law Enforcement Powers

Examples of the law enforcement/national security approach are easy to find. For example, after 9/11, the Bush Administration's Centers for Disease Control and Prevention (CDC) supported a Model State Emergency Health Powers Act (sometimes termed a "mini-Patriot Act") which purported to clarify and update the already broad coercive powers available to state governments in the event of a "public health emergency." The Act used fear to justify methods better suited to quelling public riots than protecting public health. The premise of the Act was that every outbreak of disease could be the beginning of some horrific epidemic, requiring the suspension of civil liberties.

For example, Section 502 of the model as originally proposed authorized mandatory medical examinations and testing:

> Any person refusing to submit to the medical examination and/or testing [required by a public health official] is liable for a misdemeanor...the public health authority [may subject the refusing person] to isolation or quarantine... Any ...[health care provider] refusing to perform a medical examination or test as authorized herein shall be liable for a misdemeanor....an order of the public health authority...shall be immediately enforceable by any peace officer.

Section 504 provides for compulsory treatment, something that has been soundly repudiated in the decades since at least 60,000 Americans were forcibly sterilized in the early 20th Century[9]:

> Individuals refusing to be vaccinated or treated shall be liable for a misdemeanor. [The refusing person] may be subject to isolation or quarantine... An order of the public health authority given to effectuate the purposes of this Section shall be immediately enforceable by any peace officer.

The Bush CDC's recommended law would have returned us to the late 19th and early 20th centuries when state "police powers" in health were sometimes enforced by police officers, and people who were sick were frequently treated as if they had committed a crime. But the CDC's plan would have set us back even further. It applied its penalties to people who did not have any contagious disease and to people who would never expose anyone else to disease. Moreover, it included provisions to make all public health personnel, and those acting under their orders, immune from liability for any injury—even if forced vaccination or other mandated treatments killed the "patient."

At the same time, the Act ignored effective steps that states could take to mitigate an epidemic, such as reinvigorating their public health infrastructure and increasing access to health care. Although state public health departments saw some budget increases following 9/11, most of that money was for bioterrorism preparedness activities, leaving public health agencies even more resource-starved. As a result, although some states now have new laws that more precisely specify their power to isolate or quarantine people during an emergency, they are less capable than ever of actually helping people or controlling an epidemic.

These proposals were modified and the criminal sanctions removed in response to public protest. But at least one state, Florida, enacted the "model" law nonetheless, and went even further, authorizing forced treatment of an individual if the state had no quarantine facility available for confinement. Despite criticism by public health lawyers, the Bush CDC nonetheless continues to recommend that all states "update" their laws to provide for mandatory surveillance, examination, isolation, and quarantine. In the real world, of course, laws that equate medicine and public health with law enforcement severely undercut public confidence in public health and are likely to lead people to avoid public health officials rather than to seek out and follow their guidance.

Recent Examples of the Counterproductive Law Enforcement Approach

Two recent cases involving individuals with drug-resistant tuberculosis (TB)[10] exemplify the dangers of a purely coercive, law enforcement approach to stopping the spread of disease.

One case occurred in the spring of 2007 when the CDC issued its first domestic isolation order in 40 years against Atlanta attorney Andrew Speaker. Speaker was diagnosed with multi-drug resistant tuberculosis (MDR-TB) in May 2007 and planned to seek highly specialized treatment in Denver after his impending wedding. Although he was advised by county health officials not to travel abroad for his honeymoon, he was not forbidden from doing so.

While Speaker was in Europe, a CDC laboratory diagnosed Speaker's TB as the more dangerous, extensively resistant TB (XDR-TB). At that point, instead of treating him like a client or a patient, the CDC began to treat Speaker like a dangerous public enemy. Rather than helping him and offering him a safe way to get home, the CDC contacted him in Italy and told him to stay there—leaving him sick and stranded in a foreign country, cut off from his family and other support networks. The agency also asked the Department of Homeland Security to add Speaker to the no-fly list, which is used to try to keep suspected terrorists out of the United States.

Like the citizens of Milwaukee over a century earlier, Speaker did not react to this approach the way the authorities planned. Having been previously told he could die without specialized care available only in Denver, he says he was afraid that he would be left to die in Italy. He evaded Homeland Security's efforts to prevent him from coming home for treatment, flying first to Montreal and then crossing the border at New York State, where a border guard ignored an order to detain him. Once in New York, Speaker turned himself in for treatment in the United States, which was his intention all along. Once he was undergoing treatment, doctors discovered that his disease was really multi-drug resistant (MDR-TB) and not the more dangerous extensively resistant TB (XDR-TB) after all.

While Speaker's conduct may not have been laudable, it was a predictable response to the CDC's counterproductive efforts. Treated like an enemy of the state, he engaged in evasive behavior that threatened to expose others (such as those who shared his transatlantic flight).

In the case of an epidemic, the same evasive behavior seen here in one man would likely be replicated on a mass scale that would undermine the goal of stopping the disease, if the authorities pursue this kind of coercive, law enforcement approach to the crisis.

In another case, a 27-year-old TB patient named Robert Daniels was involuntarily quarantined in Phoenix, Arizona in July 2006 for disobeying an order by Maricopa County health officials to wear a face mask in public at all times. He admitted that he on occasion did not wear his mask, and stated that he was not aware of the seriousness of his disease, and that things had worked differently in Russia where he came from. Instead of being pressured to comply, or even placed in a locked hospital isolation and treatment room, Daniels

was turned over to the Sheriff and treated as if he were a jail inmate. He remained in solitary confinement in the jail ward for nearly a year without access to showers or hot water, or even a view of the outdoors. His mail was censored, he was not permitted reading materials, and he was monitored by a video camera 24 hours a day, with no respite for private activities.

As in the Speaker case, the treatment of Daniels was utterly counterproductive. Instead of being treated, he was subject to unhealthful and psychologically depressing conditions that reduced his likelihood of recovery, and placed in a jail which did not have the facilities (such as ventilation systems) for the proper treatment of an infectious respiratory disease.

He was finally released for medical treatment and surgery to remove a lung in Denver after ACLU lawyers filed suit protesting the inhumane and unconstitutional conditions of his confinement.[11] Eventually, physicians discovered that Daniels, like Andrew Speaker, had a less dangerous form of TB than was initially suspected.

Even after he was treated and no longer contagious, Daniels continued to be handled like a criminal. Sheriff Joe Arpaio publicly threatened him with prosecution for the pre-quarantine events, and Daniels was forced to return to Phoenix in July 2007 under a court order, where he lived in a motel and was to remain under supervision of the county health department for the next year-and-a-half. But Daniels had had enough of Phoenix; in October 2007 he fled back to Russia to be with his wife and 6-year-old son.

The Daniels and Speaker cases are cautionary tales that illustrate the counterproductive nature of a punitive, law enforcement approach to preventing the spread of disease. Instead of recognizing these dangers, however, both Congressional leaders and the media presented these cases as demonstrating a need for even tougher new laws that permit aggressive and punitive action against individuals. In so doing, they did not note the futility of stopping a disease as widely prevalent as tuberculosis by detaining one single traveler, nor did they recognize the need to develop more rapid and accurate diagnostic tests and more effective TB treatments. Nor did they mention that existing treatments are not currently available to everyone with the disease. Rather, the spotlight remained on the alleged need to enact new laws to provide officials with more power to "get tough" with individual patients. This is unfortunate because:

- **It's ineffective.** The law enforcement approach has not and cannot prepare us for serious epidemics. Effective public health efforts, whether aimed at pandemic influenza or more common diseases such as TB and HIV/AIDS, are neither cheap nor glamorous. They are costly and difficult. These efforts require working with rather than against communities, providing communities with as healthy an environment as possible, health care if they need it, and the means to help themselves and their neighbors. Most importantly, to protect public health, public health policies must aim to help, rather than to suppress, the public.

- **It's dangerous for civil liberties.** The law enforcement approach to public health offers a rationale for the endless suspension of civil liberties. The "Global War on Terror" may go on for a generation, but the war on disease will continue until the end of the human race. There will always be a new disease, always the threat of a new pandemic. If that fear justifies the suspension of liberties and the institution of an emergency state, then freedom and the rule of law will be permanently suspended.

• **It's usually unjustly applied.** The law enforcement/national security approach is unlikely to affect everyone uniformly. While blatantly racist public health policies, such as those instituted by San Francisco in 1900, are unlikely today, we should not assume that the new law enforcement approach to public health will be applied in a fair and equal manner, especially at our borders. Already anti-immigrant advocates mix fears of terrorism and disease as reasons for cracking down on immigrants. Should a new disease outbreak arise, a public health policy that emphasizes coercion and the dangerousness of the sick will most assuredly fall disproportionately on those who already face discrimination and/or are least able to protect themselves.

III. Pandemic Planning: The Futility of a One-Size-Fits-All Approach

"Plans are useless, but planning is indispensable."
—Dwight D. Eisenhower[12]

Following 9/11, the U.S. government adopted an all-hazards approach to disaster planning. This one-size-fits-all approach rests on the premise that it is most efficient and effective to involve all government agencies, at all levels of government, in planning to respond to any kind of a disaster—including hurricanes, earthquakes, floods, flu pandemics, bioterrorism, nuclear attacks, and chemical attacks.

Unfortunately, this approach is virtually useless, if not counterproductive. That is because each hazard has its own unique features. Planning for levee protection in New Orleans will not help prepare for an earthquake in San Francisco or a terrorist explosion in New York or Washington, D.C., anymore than planning for a chemical or nuclear attack will help prepare us for a bird flu pandemic or a smallpox attack. Nor are generic all-hazards plans for a public health emergency, including "model" laws to implement mass quarantines, of any use in a storm, flood, fire, earthquake, chemical attack, or nuclear or conventional arms attack.

The effect of the one-size-fits-all approach is to suggest that no matter what happens, be it flu or bioterrorism, a law enforcement/national security approach is required.

Of course, planning for disaster permits responsible officials to get to know each other and to gain some experience and knowledge of one another's capabilities, making a coordinated and effective response more likely. But plans go out the window in a real emergency, and planning for extreme and highly improbable "worst case scenarios" can lead to over-reaction that will make a disaster worse than it otherwise would have been.

For example, the CDC hoped that its Model State Emergency Health Powers Act would apply to any "public health emergency." But its one-size-fits-all approach would leave the states unable to respond to different types of emergencies with anything except force. Since states already had the power to isolate people who would otherwise spread contagious diseases, the model recommended granting public health personnel exceptionally broad powers. If enacted as originally proposed, for example, the model would have made it a crime for physicians to refuse orders from pubic health officials.[13]

In principle, the idea that the country should be prepared for all types of potential emergencies is sound. In practice, however, planning for "all hazards" has failed to take into account the most important factor that drives disasters—the particular hazard itself, whether biological, chemical, explosive or nuclear. In the case of possible pandemics, our ability to limit widespread death and illness (and the measures to do so) depends upon the nature of the pathogen, when it is transmissible (before or after symptoms appear), the probability of infection given exposure, the probability of serious illness or death given infec-

tion (the case fatality rate), and whether infection can be prevented by existing vaccines or illness treated by existing medications. By ignoring these essential policy determinants, the all-hazards approach falls back on generic authorizations of law enforcement and non-specific coercion, which are likely to make a bad situation worse.

Having nothing specifically protective to offer, the federal government appears to have had little choice but to shift responsibility for damage control to the people themselves. This result of the inadequacy of all-hazards planning was illustrated by the government's response to Hurricane Katrina. [See Box.] More than a year after Katrina, Secretary of the Department of Homeland Security Michael Chertoff told the annual National Hurricane Conference in Orlando that this experience led him to conclude that Americans should be responsible for themselves:

> I believe [people] have a civic responsibility to take some sensible steps to get ready for hurricane season...People should be able to sustain themselves for up to 72 hours after a disaster... that means individuals—especially those in the Gulf states—need to have an emergency plan and an emergency kit with adequate supplies of food, water, and other essentials like a flashlight, first-aid, and medicines.

Katrina and the All-Hazards Approach to Preparedness

Hurricane Katrina, aptly described as the country's worst post-9/11 disaster, illustrates the dangers of the "all-hazards" approach to preparedness. There was no shortage of law enforcement in New Orleans before the hurricane. Yet, no military force, police force, or border patrol can prevent a storm from entering the U.S. homeland.

The person in charge of our all-hazards response at the time Katrina made landfall was Homeland Security Secretary Michael Chertoff. As New Orleans flooded, Chertoff was in Atlanta working on "all-hazards" preparations for a bird flu pandemic, and his agency took almost a week to mount a response to Katrina. The CDC, which still plans for "all-hazards," had virtually no response to Katrina other than telling those left in New Orleans not to drink the water and people in shelters and elsewhere to "wash your hands." Although public health officials have since begun planning, for example, to ration hospital beds in an emergency—no one had effectively planned to evacuate New Orleans hospitals in a flood. No one had prepared an alternative site for care. No one had provided stranded residents with a means of evacuation or the necessities for surviving in the city.

Perhaps recognizing this, no one in authority in Louisiana suggested using the state's post-9/11 emergency public health powers, which authorized mass quarantines, forced treatment, and state takeover of hospitals. Such generic powers simply were not relevant. It was the failure to properly design the levee system that led to the Katrina disaster, a failure not mitigated at all by either the "all-hazards" approach or our over-reliance on the U.S. military or law enforcement to get us out of every disaster that befalls us. Rather, over-emphasis on generic worst case scenarios makes it unlikely that there will be any effective response to real emergency situations in all their specificity and uniqueness.

A similar attitude prevails with respect to pandemics. Although primary responsibility for pandemic planning was ultimately transferred to the Department of Health and Human Services, where it belongs, ultimate responsibility remains with the general public in "all hazards." HHS Secretary Michael Leavitt, for example, has observed, "Communities that fail to prepare, expecting the federal government to come to the rescue, will be tragically mistaken." Leavitt made this statement even though the federal government has been given new authority to call in the U.S. military (and, apparently, private security forces) to restore order in an emergency without the consent of the governor of a state.

Of course it makes sense for both individuals and communities to plan to protect themselves in the event of an emergency. But as the New York Academy of Medicine concluded in its 2007 study, *With the Public's Knowledge, We Can make Sheltering in Place Possible:*

> Currently, planners are developing emergency instructions for people to follow *without* finding out whether it is actually possible for them to do so or whether the instructions are even the most protective action for certain groups of people to take.

IV. Current Pandemic Flu Plans: Dangerously Counterproductive

Current government planning for pandemic flu remains oriented around a law enforcement/national security approach that will both limit the effectiveness of a governmental response and put the civil liberties of Americans at great risk. That approach renders them not only useless but dangerously counterproductive.

There are a large number of pandemic flu plans in circulation. The federal government, almost every state and locality, many schools and businesses, and the World Health Organization, all have their own plans. Yet there is little coordination—itself a confirmation of President Eisenhower's observation that "plans are useless."

A major reason why most current plans (which continue to evolve) are useless is that they assume the worst case scenario. Worst case scenario planning encourages counterproductive overreactions in which law-enforcement techniques and drastic anti-civil liberties measures are used as the first resort, rather than the last resort. Although it is widely recognized that there were three flu pandemics in the past century (1918, 1957, and 1968), and that another pandemic seems inevitable at some point, all plans assume the "worst case," i.e., that the model to plan for is 1918, and not the more recent and less catastrophic pandemics of 1957 and 1968. This means there is little or no planning for measures to help the population in lesser, and more frequent, emergencies.

The problems with current plans include:

- **A reliance on coercion.** Although most of the verbiage in these plans is vapid and virtually without content, and based on assumptions that will inevitably turn out to be mistaken, the one commonality they all possess is reliance on coercive actions such as quarantine and forced treatment. This is despite the fact that such measures are generally acknowledged by experts to be either completely ineffective or only potentially marginally effective in the case of flu. But law enforcement and national security continue to be the key elements, perhaps not surprising given President Bush's first suggestion to contain a bird flu pandemic: calling out the military to quarantine large sections of the United States to prevent flu from spreading across the country.

- **A lack of specifics.** Because these plans do not give those in charge any specific, useful tasks to perform (beyond distributing stockpiled drugs and vaccines, if and when they are developed and produced), public authorities are apt to take useless and counterproductive anti-civil liberties actions to demonstrate that they are "doing something" to respond to the crisis.

- **A loss of privacy.** Planning for the worst case encourages health officials to view symptoms of almost any illness as the potential beginning of a pandemic. Pressure to find the first possible case of flu as fast as possible has encouraged wide-ranging surveillance systems to permanently monitor individual medical records and pharmacy purchases and link them to data bases in law enforcement, homeland security, agriculture, bank-

ing, customs and immigration. As a result, the punitive all-hazards approach encourages the wide-spread, unnecessary and permanent violation of individuals' privacy.

Current Government Plans: Two Examples

An example of these flaws is the *Pandemic Influenza Plan* of the U.S. Department of Health and Human Services (last revision, May 2007), which posits a "containment" strategy based on a massive use of force by all levels of government:

> Containment attempts would require stringent infection-control measures such as bans on large public gatherings, isolation of symptomatic individuals, prophylaxis of the entire community with antiviral drugs, and various forms of movement restrictions—possibly even including a quarantine...if a containment attempt is to have a chance of succeeding, the response must employ the assets of multiple partners in a well coordinated way.[14]

The Implementation Plan of the Homeland Security Council's *National Strategy for Pandemic Influenza* (May 2006), consistent with an "all-hazards" approach, views pandemic influenza planning as an adjunct to homeland security planning, the plan being designed to "combat" pandemic influenza.[15] Its executive summary accurately identifies the development of "rapid diagnostic tests" (as well as quicker methods to develop a flu strain-specific vaccine) as being critical to an effective response. Nonetheless, it places emphasis on the restrictions of movement of people in the U.S., referencing with approval CDC recommendations for increasing quarantine authority, including its Orwellian proposal for authority to impose "provisional quarantine" on travelers, which have been almost universally criticized as arbitrary and useless.

All of this emphasis on containment and quarantine during a flu pandemic is particularly disturbing given the almost complete lack of success of any quarantines anywhere in the world for pandemic flu (the one exception: the island of American Samoa during the 1918 pandemic). The Institute of Medicine took note of advice by Donald A. Henderson, of the University of Pittsburgh Medical Center, who "cautioned against relying on models that do not take into consideration the adverse effects or practical constraints that such public health interventions [like quarantine] would entail. Accepting such models uncritically, he warned, could result in policies that 'take a perfectly manageable epidemic and turn it into a national disaster.'"[16]

A Presidential Directive

Nonetheless, planning for pandemic flu has become part of "biodefense," with the military's role in public health programs increasing. For example, an October 18, 2007 Presidential Directive on "Public Health and Medical Preparedness" provides for the Department of Homeland Security, in coordination with the Department of Health and Human Services, to brief nonhealth professionals and state governors, mayors and senior county officials on "the risks to public health posed by relevant threats and catastrophic health events (including attacks involving weapons of mass destruction)" and "shall ensure that full use is made of Department of Defense expertise and resources."[17] The Directive also requires the Secretaries of Health and Human Services and Defense (in coordination with the Secretaries of Veterans Affairs and Homeland Security), to create a "Joint Program for Disaster Medicine and Public Health at the Uniformed Services University of the Health

Sciences." This new academic program is to "lead federal efforts to develop and propagate core curricular, training, and research related to medicine and public health in disasters."[18]

The Directive also calls for building a national "biosurveillance" system using electronic health information systems to collect information (presumably personally identifiable) about unspecified diseases and medical conditions. Although the system is to "protect patient privacy by restricting access to identifying information to the greatest extent possible and only to public health officials with a need to know," the program is to be overseen by an Epidemiologic Surveillance Federal Advisory Committee, to be established by the Secretary of Health and Human Services, in coordination with the Secretaries of Defense, Veterans Affairs, and Homeland Security.[19] Although early detection of an epidemic is a good idea, this system is not limited to contagious diseases or times of emergency, but encourages a permanent system for monitoring medical records for many different purposes, eroding the privacy of all patients. More ominously, the participation of military and homeland security officials in this public health venture raises questions about how the information will be used.

We should also be concerned that antiviral medications, and ultimately vaccines, will not be made available early on to judges and their staffs (who are currently not mentioned anywhere on government-approved priority lists for drugs and vaccines in a flu pandemic). In fact, a draft prepared by an intergovernmental agency group, the Draft Guidance on Allocating and Targeting Pandemic Influenza Vaccine, gives highest priority for flu vaccine to active duty military personnel.[20] In a real pandemic, the courts are likely to be closed and judicial review of confinement and forced treatment simply will not be available. Coupled with the broad grant of immunity for drug manufacturers that Congress has already enacted, and the proposed immunity for public officials, as well as volunteers working under the direction of public officials, public fear of out-of-control police actions is justified.

A Better Approach Is Urgently Needed

The University of Pittsburgh's Center for Biosecurity, perhaps the most respected such center in the U.S., has recently issued 8 major findings from their "Working Group on Community Engagement in Health Emergency Planning," which are measured and sensible. All reflect reality more clearly than any current governmental plan. The first two findings deserve special attention in the context of planning for a public health emergency:

1. **Members of the public are first responders and outbreak managers, too:** Disaster and epidemics are big shocking events that require the judgment, effort, and courage of many people, not just authorities. Research shows that family, friends, coworkers, neighbors, and total strangers often conduct search and rescue activities and provide medical aid before police, fire, and other officials arrive. During epidemics, volunteers have helped run mass vaccination clinics, nurse home-bound patients, support the sick and their families.

2. **Stockpiling in case of an emergency is both too much and too little to ask of Americans:** Realistic planning entails much more than a list of things people should buy to protect themselves. Officials need to work with citizens and community-based organizations before disaster strikes to promote all the ways the public can contribute to preparedness, including taking part in policy decisions, building more robust volunteer networks, and obtaining support for tax or bond measures that help reduce vulnerability and improve health and safety agencies. American ideals about self-sufficiency can inadvertently stymie preparedness by undervaluing the benefits of mutual aid.

In short, plans that promote and rely on a law enforcement/national security model that assumes effective responses are a function of harsh police actions will likely fail to protect the public's health and needlessly trample civil liberties. Plans that democratically engage the community and rely on voluntary actions, including funding research for new drugs and vaccines, are the most likely to succeed.

V. Recommendations

Both history and current events demonstrate the need for a new, positive paradigm for pandemic preparedness, one that harnesses the talents of all Americans to take effective action to protect the health of all, instead of punishing those who fall ill. This new paradigm should be based on four fundamental principles: Health, Justice, Transparency, and Accountability.

General Principles

1. **Health.** *The goal of preparing for a pandemic is to protect the lives and health of all people in America, not law enforcement or national security.*

In contrast to law enforcement and national security measures, which are designed to punish criminal offenses or acts of war, a public health approach to preparedness rightly focuses on preventing illness, rather than punishing people who are ill. This approach recognizes the need for a robust and well-funded public health system that can keep communities healthy all of the time, not only during a so-called emergency. Threats to health will not be limited to a contagious disease, but will include losses of resources necessary for health and survival, such as safe food, water, shelter, income, and communications, as well as medications. A public health approach treats everyone in the population as deserving of protection, not as the source of disaster.

2. **Justice.** *Preparation for a potential pandemic (or any disaster) should ensure a fair distribution of the benefits and burdens of precautions and responses and equal respect for the dignity and autonomy of each individual.*

In a democracy based on the rule of law, principles of justice govern the response to disasters, as well as ordinary circumstances. Everyone in the United States should have an equal opportunity for protection against disaster. Historically, epidemics and natural disasters have caused substantially more illness and death among people who were already disadvantaged because of social, economic, or medical conditions. Justice requires that people who are unable to protect themselves be provided with the means necessary to do so before disaster strikes. Preparations for emergencies should never be biased against the most vulnerable, but should compensate for resources that are lacking.

3. **Transparency.** *Pandemic preparedness requires transparent communication of accurate information among all levels of government and the public in order to warrant public trust.*

A healthy democracy depends upon mutual trust between government and the people. Individuals who trust the government to protect their liberties are more likely to trust government to protect their lives and health. Distrust engenders resistance. Similarly, a democratic government should trust its people to respond positively in an emergency. Private indi-

viduals are the immediate first responders in an emergency and ordinarily the best judges of their own resources and needs. Civic engagement harnesses the problem-solving talents of individuals, organizations and networks to develop plans for emergencies; and people participate more freely and efficiently in plans they help formulate and implement. The more government officials try to control events, the more they will be blamed for not preventing disasters or for the inevitable mistakes in responding.

Transparency is an essential prerequisite for gaining public trust. People are more likely to cooperate with reasonable requests when they are confident that government officials are being honest about the probabilities of risk and outcomes, and are willing to acknowledge uncertainty and admit mistakes.

4. **Accountability.** *Everyone, including private individuals and organizations and government agencies and officials, should be accountable for their actions before, during and after an emergency*.

The rule of law demands protection of rights and duties, even when they are most unpopular. The prospect of accountability is often the only check on temptations to act unjustly during emergencies. The more latitude government officials are granted during emergencies, the more important it is to hold them accountable for significant errors, arbitrary actions and abuses of power.

Specific Recommendations

These four general principles are the foundation for the following more specific recommendations concerning measures to prepare for a pandemic:

Protecting Health

1. The government should ensure stockpiling and fair and efficient distribution of vaccines, medications, food, water, and other necessaries in the event of a pandemic.

2. Distribution and rationing decisions for vaccination and treatment should be based on the goal of minimizing the detrimental health effects of the pandemic.

3. Public health measures must not be based on race, color, ethnicity, national origin, religion, gender or sexual orientation and can be based on age or disability only if there is good reason to believe particular groups are either at much higher risk of death or have a much higher likelihood of spreading the disease if not vaccinated or treated.

4. Access to vaccination or treatment should not be conditioned on a waiver of one's constitutional rights.

5. The government and the private sector should encourage and support the development of rapid, accurate diagnostic tests for infectious diseases that reduce the possibility for error in identifying individuals who have a dangerous contagious disease.

6. Non-emergency programs to protect the public's health should be supported in order to develop and preserve a healthy population that can optimally survive emergencies.

7. Government plans for responding to a pandemic should be based on the concept of community engagement, rather than individual responsibility.

Protecting Liberty

8. In a pandemic, governments should rely primarily on voluntary social distancing measures, including school closings and voluntary home quarantines, in preference to mandatory quarantines. In order to improve the effectiveness of voluntary social distancing measures, governments should enact laws to protect the jobs and income of people who stay at home, or whose workplaces are closed, under the advice of medical or public health personnel.

9. Governments should ensure that individuals who follow public health advice and stay at home during a pandemic receive food, medicine, and all other necessities.

10. Coercive measures should be imposed only when there is a sound scientific and constitutional basis for so doing and only when they are the least restrictive alternative and are imposed in the least restrictive manner.

11. Individuals who are proposed for detention should be provided with counsel and an expeditious judicial hearing to ensure that their detention is in fact legally justified. The government should bear the burden to demonstrate by clear and convincing evidence that the detained individual poses a significant risk of danger to others and that that risk cannot be mitigated by less restrictive measures.

12. Individuals who are detained should be housed in a medical facility, never in a correctional facility.

13. Travel bans should only be imposed when there is a reasonable scientific justification and only to the degree necessary to prevent the spread of disease.

14. Individuals who are denied the right to travel because they are deemed to be of high risk should be provided procedural due process, including notice, the right to counsel, and the opportunity to be heard before an independent decision maker.

15. Invasive medical examinations, even at the border, should only be conducted when there is reasonable suspicion of pandemic disease, and only with the individual's informed consent.

Protecting Privacy

16. Disease surveillance generally should be conducted using methods, such as syndromic surveillance, that do not require the use of individual names without the individual's consent. Compulsory reports of names and other individually identifiable patient information should be limited to cases in which a person with a contagious disease poses a credible threat of exposing others to infection and an authorized government agency expects to interview the person in order to investigate the outbreak.

17. Mandatory reporting laws should specify procedures for keeping identifiable information strictly confidential and secure (including audit trail) and penalties for failure to maintain confidentiality.

18. Government agencies that legitimately receive identifiable information should not use any identifiable information for purposes other than investigating potential disease outbreaks without the individual's prior authorization.

19. Data collected for purposes of investigating or monitoring the incidence or prevalence of diseases should not be linked with other data that would permit identifying the individual.

20. Federal agencies should not condition funding on the existence of state laws requiring patient names or other personally identifiable medical information to be reported to any state or federal agency or private entity.

Protecting Democracy

21. All public and private entities should remain accountable for their actions in accordance with the law and should not be relieved of liability for gross negligence, recklessness, arbitrary and capricious action, abuse of power, or criminal offenses.

22. Every effort should be made to preserve the operation of the judicial system and to protect the lives and health of judges and personnel needed to ensure the rule of law.

23. Government should provide clear, accurate, and timely information to the public and honestly report uncertainties in the available information.

Appendix

Pandemic Preparedness and Constitutional Law

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I. Public Health Surveillance and Medical Privacy

A. Pandemic Preparedness and Surveillance

Since 9/11 surveillance to detect terrorist attacks with biological agents and surveillance to detect contagious diseases have become virtually indistinguishable. Because it is impossible to know whether the first appearance of influenza results from a natural outbreak, a laboratory accident, terrorism or crime, laws enacted to detect terrorism or pandemics inevitably apply to ordinary disease outbreaks. Without specific justification, surveillance could become the kind of data-mining that the Technology and Privacy Advisory Committee called "a 21st-century equivalent of general searches, which the authors of the Bill of Rights were so concerned to protect against."[21]

The most common form of public health surveillance is mandatory case reporting which compels physicians, health facilities, and laboratories to report patient names and personally identifiable medical information (PII) to health departments without the individual's consent.[22] Some laws permit, without requiring, third parties to report PII without the patient's consent. Some surveys and research studies collect PII with individual consent to participation, while others collect data stripped of all PII.

B. Overview of Federal and State Authority

Federal authority to require the reporting of names of people with contagious diseases is based on Congress's powers to regulate foreign and interstate commerce, immigration and naturalization, and military forces. Public Health Service Act provisions are aimed at keeping contagious diseases from entering the country, either via an immigrant or traveler or via cargo of a ship or airplane.[23] The Act authorizes measures such as quarantining and disinfecting a vessel, but barely references reporting obligations, apart from requiring captains to report contagious diseases on board ships before entering port.

States rely on their inherent police power (to protect public health and safety) to enact mandatory case reporting laws. Their original goal, before vaccines and modern medicines, was to alert local government to the presence of a dangerous, contagious disease (also called "communicable," "dangerous," or "notifiable" in early legislation). Reports with names are important if the health department must contact the patient in person in order to investigate (and remove or limit) the source of infection and warn others who might have been exposed. Case reports also identified individuals who might be involuntarily detained because they threatened to spread a dangerous disease to others.[24] Today, few reports are investigated because most patients are adequately cared for by their physicians and are willing and able to avoid infecting others. Nonetheless, state laws continue to require periodic reporting of all cases of specific diseases. The reports serve as a data base for calculating disease incidence and prevalence, conducting research, and informing policy.

The Centers for Disease Control and Prevention (CDC) and the Council of State and Territorial Epidemiologists recommend diseases for reporting, but cannot compel the states to adopt them. Many state surveillance programs depend on federal funding for their operation, however. Federal funds are often conditioned on requirements that the state collect names and detailed PII, which pressures states to enact mandatory named reporting laws. Apart from outbreak investigation, names are used primarily to make sure an individual is counted only once in statistical reports and studies.

C. Legal Principles Protecting Medical Privacy

1. State Statutory and Common Law

State case law, legislation, and some state constitutions recognize general and specific individual rights of privacy in personal medical information and impose duties of confidentiality on physicians and other care providers, which forbid disclosing identifiable patient information without the patient's consent. States must also meet constitutional standards for exercising the police power in order to enact legislation overriding individual privacy interests.

2. Invasions of Privacy: The Due Process Clause, Amendments V and XIV

The Supreme Court has recognized that the Due Process Clause protects an "individual interest in avoiding disclosure of personal matters," without fully defining its scope.[25] The Court has never reviewed a mandatory disease reporting law. The presumed constitutionality of such laws appears to be based on general statements in *Whalen v. Roe*, in which the Supreme Court upheld a state law requiring that a copy of prescriptions for Schedule II controlled substances (with patient names) be sent to the health department, because the state had a legitimate interest in deterring or investigating unlawful drug diversion.[26] Three abortion decisions have also upheld laws requiring reporting abortion cases without patient names to monitor physician compliance with abortion restrictions and review outcomes, where this could plausibly contribute to "the preservation of maternal health." [27]

These first generation cases suggest that the state could require case reporting *without* names or other PII for the purpose of monitoring the statistical occurrence of diseases. The power to require reporting of names and other PII, however, may be much narrower. Despite *dictum* in *Whalen* comparing the prescription reporting law to venereal disease and child abuse reporting laws, a few recent cases recognize that the initial report to the state should be considered an invasion of privacy unless it can be specifically justified as necessary for a relevant state purpose.[28] Heightened scrutiny is increasingly applied where individuals have reasonable expectations of privacy, as where the information is intimate or personal or its disclosure could chill the exercise of a constitutional right.[29] The Supreme Court's recognition of constitutional protection for patients' medical care choices strengthens patients' expectations of privacy.[30] Thus, the ongoing reporting of diseases may no longer be justifiable without demonstrating that the state needs to contact individual patients to prevent the spread of a dangerous disease.

3. Unreasonable Searches and Seizures: Fourth Amendment

Few Supreme Court decisions interpret the Fourth Amendment's application to civil laws compelling information disclosure, and none involve disease reporting laws. A footnote in *Whalen* may have fostered a belief that such laws are not subject to Fourth Amendment standards, because they collect data from third parties for a civil purpose.[31] However, compulsory reporting of personally identifiable medical information should qualify as either a search, because it infringes a patient's reasonable expectation of privacy, or as a seizure, because it interferes with an individual's possessory interests in property (information content),[32] even in the civil context.[33]

The line of cases permitting government to obtain business records from third parties without a warrant address *criminal* investigations of *particular* suspects.[34] In contrast, reporting laws authorize the ongoing collection of information about thousands of people

without individualized suspicion or a warrant in order to detect epidemics (or conduct research). Unlike business records, the Court has said that patients have a reasonable expectation that the information they provide to their physicians "will not be shared with nonmedical personnel" without the patient's consent.[35] The contrary view—that consent to diagnostic testing for medical care creates a voluntary record which could be reported to government without constituting a search or seizure—is implausible, because it would authorize government to seize medical records for any reason at all.[36] This argues for the necessity of an independent justification for reporting.

The closest analogy may be the Supreme Court decisions concerning suspicionless drug testing. These cases have upheld suspicionless drug testing (searches) when government demonstrates a "special need" *unrelated to law enforcement* to identify individuals who should be excluded from a government program or employment or public school activities, primarily for reasons of public safety, where the individual's privacy interest is minimal. [37] This test would undoubtedly uphold compulsory reporting of identifiable medical information to find the source of dangerous contagious diseases to prevent an epidemic from developing.[38] However, as lower courts have begun to recognize, compulsory reporting of PII for other purposes may not be justifiable where there is no need to identify individuals. [39]

4. The HIPAA Privacy Rule

The HIPAA Privacy Rule permits, but does not require, "covered entities" to disclose identifiable patient information to health departments for certain public health purposes without the patient's authorization.[40] Covered entities, like physicians and hospitals, have no legal duty to report identifiable information in the absence of a valid law that itself requires reporting. The *duty* to report, therefore, depends upon the constitutionality of the state mandatory reporting law.

II. ISOLATION, QUARANTINE & FORCED TREATMENT

A. Overview

Compulsory isolation and quarantine are among the most coercive non-pharmaceutical interventions that may be employed during a pandemic. Generically, the term quarantine is used to refer to all restrictions in the movement of individuals or goods to prevent the spread of a disease. A sanitary cordon is a form of quarantine that restricts movement into or out of a region. In contrast, isolation refers to the segregation of individuals who are known to be ill with an infectious disease. Although individuals can voluntarily submit to either isolation or quarantine, civil liberties concerns arise when these interventions are imposed by law.

As a practical matter, patients who are ill rarely resist isolation. In a pandemic, the real problem will be a shortage of isolation (treatment) beds, not the need to force people into treatment. Likewise, for exposed, but not sick, individuals, mass mandatory quarantines are unlikely to stop a pandemic and would be impossible to enforce. Nevertheless, in 2005 President Bush suggested that the military might be used to impose mass quarantines, and

federal pandemic plans suggest use of isolation and quarantine to buy time during a pandemic.[41] Moreover, history warns that vulnerable populations may well be subjected to unnecessary and arbitrary detentions if a pandemic strikes.

The same point is applicable to vaccinations. The problem will not be that force is needed to vaccinate the population, rather that vaccine will be unavailable or in limited supply and will have to be rationed while people line up to demand access. Nonetheless it is worth emphasizing to public officials that the Supreme Court has ruled that competent individuals have a right to refuse any medical treatment, including life-sustaining treatment, and this includes vaccinations. Experimental vaccines can likewise always be refused, but once proven safe and effective, parents may have an obligation to have their children vaccinated, and governments have an obligation to make vaccine available to those in their custody, their workforce, and citizens unable to protect themselves. In addition, if it is reasonable for public health officials to find that an individual poses a significant risk to others by refusing examination or treatment by a qualified, licensed physician, quarantining that person would probably be constitutionally acceptable.

B. State and Federal Authority

Traditionally, public health protection has been viewed as within the states' police powers. Within each state, specific statutes govern isolation and quarantine. Historically, these statutes gave health officials broad authority and specified few procedural protections for affected individuals. Newer statutes often detail the procedures that a health department must follow when detaining individuals. Some state statutes now make clear that individuals cannot be detained unless there is no less restrictive alternative, such as voluntary confinement at home. In the past, the federal government has only detained individuals for health reasons at the border or at quarantine stations on navigable waters. Recently, however, the federal government has begun to plan for domestic detentions, and in the 2007 case of Andrew Speaker mandated isolation for what was thought to be XDR-TB.

Despite past practice, the commerce clause gives Congress authority to impose non-pharmaceutical interventions, including isolation and quarantine, within the states. Section 361 of the Public Health Services Act authorizes the federal government (acting through CDC) to promulgate regulations and apprehend, detain, and forcibly examine persons in order to prevent a disease listed by the President from entering the country or crossing state lines.[42] Individuals who are contagious or are "in a precommunicable stage, if the disease would be likely to cause a public health emergency if transmitted to other individuals" may be detained.[43] In 2005, the President amended the list of quarantineable diseases to include "[i]nfluenza caused by novel or reemergent influenza viruses that have the potential to cause a pandemic."[44]

42 U.S.C. 243 permits the federal government, if requested by a state, to suppress communicable diseases and enforce state quarantines and other health laws for up to six months. In addition, the Stafford Act permits the President to implement health and safety measures when a disaster has been declared.[45] Also relevant is the John Warner National Defense Authorization Act which authorizes the President to employ the armed forces to "restore public order and enforce the laws of the United States" during a "serious public health emergency..."[46]

Existing federal regulations provide almost no guidance as to when the federal government may detain individuals or what procedures must be followed.[47] In 2005, CDC pub-

lished proposed quarantine regulations that would have authorized detention of individuals entering the U.S. as well as those who are "moving from state to state" or likely to infect someone who is moving across state lines.[48] The proposed regulations were met with wide criticism. They remain pending.

C. Constitutional Rights

Constitutional principles are not suspended during epidemics, and individuals who are detained are entitled to judicial review, at the least through the writ of habeas corpus.

Equal Protection:

Historically, immigrants, minorities, and other disfavored groups (such as sex workers) have borne the brunt of public health measures, especially detention. In 1900, a federal court recognized that a racially-discriminatory quarantine violated the Equal Protection clause.[49] Today, there is little doubt that any public health measures based on explicit racial or ethnic criteria would be found unconstitutional. A real danger exists, however, that officials may apply a facially neutral measure in a discriminatory manner. In such cases, without clear evidence of invidious intent, courts are unlikely to find a violation of the Equal Protection clause.

Substantive Due Process:

All public health orders restrain liberty. In analyzing the substantive due process limits on public health measures, it is important to distinguish interventions that invade the bodies of individuals from those that impose lesser burdens.

In cases concerning the isolation of TB patients, lower courts have looked to civil commitment cases and concluded that a state may detain individuals only when they have a contagious disease and when there is a substantial risk (generally indicated by the individual's past behavior) that the individual will behave in such a way as to expose others to a serious contagious disease.[50] Moreover, although the Supreme Court has never stated so explicitly, most courts find that detention is justified only when it is the least restrictive alternative. Thus, for example, a state should not be able to confine individuals to institutions without showing that they cannot remain safely at home. Finally, judgments as to dangerousness should be individualized and not based on group characteristics.

Many questions remain. For example, no recent case discusses whether detention is permitted when an individual is only suspected of having been exposed to an infectious disease. Nor is there any contemporary case law on sanitary cordons or other measures short of detention. Unless such measures target a protected class or another constitutionally protected right (such as the First Amendment) they are apt to be viewed as less restrictive measures and to be upheld as long as they are rationally related to the state's public health goals.[51]

Procedural Due Process:

Looking to civil commitment cases, courts have held that individuals detained by health officials are entitled to a fairly expansive set of procedural protections.[52] In TB cases, this has included the right to an expeditious hearing before a court, the right to appointed counsel, and the requirement that the state present clear and convincing evidence that the individual poses a risk to the health of others.[53] Presumably the process due would be less extensive if the deprivation of liberty were less extreme, as with a sanitary cordon.

It is unclear just how expeditious a hearing must be, or when detention can precede a hearing. Second, it is not clear whether courts would demand individualized hearings if large groups of people were detained (for example, everyone who had been to a certain building). Finally, it is uncertain what would happen if courts cannot function. If courts close down during a pandemic, the right to an expeditious hearing may prove illusory.

Conditions of Confinement:

The government has a constitutional obligation to provide food and necessary medicine for those it detains. The Supreme Court has stated that when a state "takes a person into its custody and holds him there against his will, the Constitution imposes upon it a corresponding duty to assume some responsibility for his safety and general well-being."[54] As a practical matter, no mandatory or voluntary quarantine will be effective unless people know that they and their family will be provided for.

III. Travel Restrictions

A. Introduction

The danger posed by travel is a prominent feature of most pandemic preparedness discussions, and with some reason. Many of the world's worst pandemics, including the Black Death of the 14th century, the cholera epidemics of the 19th century, and the 1918 influenza pandemic accompanied travelers, traders, and warriors across the globe. In 2003 SARS was spread around the world by travelers from Guangdong, China.

Economic concerns about loss of travel and trade have often caused governments to resist issuing travel alerts and limiting travel. On the other hand, fears of disease often mix with xenophobia, leading to inappropriate and harsh restrictions on immigrants and foreign nationals. Today, some anti-immigration activists claim that Mexican immigrants are bringing tuberculosis and leprosy to the United States.[55] Thus if a pandemic occurs, a critical challenge will be to ensure that prejudice plays no role in developing or implementing travel regulations.

B. International Health Regulations

The SARS experience in 2003 exposed significant inadequacies with the existing International Health Regulations. In particular, the regulations applied only to a few specific diseases, did not authorize the World Health Organization (WHO) to rely on information obtained from non-governmental sources, and did not authorize WHO to issue the travel advisories that were issued.[56] In response, in 2005 the World Health Assembly adopted revised international health regulations (IHR), which became effective on June 15, 2007.[57]

The revised IHR contain provisions that apply broadly to any "public health emergency of international concern." [58] The regulations permit states to require travelers to provide health information and to require medical examinations with informed consent as a condition of entry.[59] Isolation and quarantine of travelers is permitted to control an "imminent public health risk."[60] However, in all cases, travelers must be treated "with respect for their dignity, human rights and fundamental freedoms and minimize any discomfort or dis-

tress associated with such measures...[61] The IHR also prohibit states from imposing measures beyond those called for in the regulations if they are "more restrictive of international travel" or "more invasive or intrusive to persons than reasonably available alternatives that would achieve the appropriate level of health protection."[62]

C. Interstate Travel Restrictions

The right to travel is strongest when applied to interstate travel. The Constitution "require[s] that all citizens be free to travel throughout the length and breadth of our land uninhibited by statutes, rules, or regulations which unreasonably burden or restrict this movement."[63] Because of this, interstate travel restrictions receive strict scrutiny.

Nevertheless, interstate travel may be restricted when there is a direct threat of disease. In *Zemel v. Rusk,* the Court stated the right to interstate travel "does not mean that areas ravaged by flood, fire or pestilence cannot be quarantined when it can be demonstrated that unlimited travel to the area would directly and materially interfere with the safety and welfare of the area or the Nation as a whole."[64]

In a pandemic, governments may either impose broad bans on travel or seek to prohibit travel only by individuals who are thought to pose a high risk, perhaps because of their health status or contacts. Reportedly, Florida is now issuing isolation orders to tuberculosis patients who seek to travel.[65] Because the state is targeting *travelers,* strict scrutiny should apply. As a practical matter, however, courts are not likely to review such cases differently than other cases of mandatory isolation.[66] The right to interstate travel is fundamental, but particular modes of travel are not constitutionally protected.[67] Thus a ban on domestic air travel would be subjected to less scrutiny than a law that simply prohibits traveling across state lines.

D. International Travel

The right to travel internationally is also "part of the 'liberty'" protected by due process,[68] but it is afforded less constitutional protection than interstate travel.[69] As a result, unless other constitutional interests (such as the First Amendment or Equal Protection) are at stake, federal restrictions on international travel are subject only to the rational basis test. For example, the Court has found that national security justifies restricting travel to Cuba.[70] Although travel advisories and alerts are more likely, courts would probably uphold a ban on travel to or from a particular nation or part of the world in which there is an outbreak of a dangerous form of influenza.

The federal government may also attempt to limit travel by revoking the passports of certain high risk individuals. An individualized hearing should be required. Nonetheless, the Second Circuit has held that when the State Department denies a passport pursuant to its discretionary authority, procedural due process does not apply.[71] More recently, a federal district court has held that citizens on a terrorism watch list who are detained when they travel are not entitled to a due process hearing unless they can show that they have been stigmatized by the government's action.[72]

At the Border

If a pandemic arises, the federal government may require medical examinations at the border. Although the Fourth Amendment provides less protection at the border, reasonable suspicion is required for a "non-routine" search, such as an invasive medical examination.[73] A distinction needs to be made, however, between coerced medical examinations of citizens and travelers with U.S. passports or visas, and medical examinations of those wishing to obtain visas. According to the Fifth Circuit, "over no conceivable subject is the legislative power of Congress more complete than it is over admission of aliens."[74] Currently, the Immigration and Nationality Act requires would-be immigrants and refugees to undergo a medical examination to determine if they have HIV or another "communicable disease of public health significance." [75] The current list of prohibited diseases does not include influenza, but HHS could easily add it to the list.

In a pandemic the federal government may detain individuals at the border or deny them entry to the United States. The "Government's interest in preventing the entry of unwanted persons and effects is at its zenith at the international border."[76] And at least one court has recently found that the government only needs a rational basis for detaining citizens at the border.[77] Courts have been even less solicitous of claims by noncitizens, but even in this case have required medical care for those detained.[78]

E. Treatment of Immigrants inside the United States

Historically, immigrants have often been abused during epidemics. Given current anti-immigrant feelings, there is a major risk that immigrants, legal and illegal, will bear the brunt of anti-pandemic measures. Because of the scope of federal authority over immigration, state or local public health measures that discriminate against aliens are likely preempted by federal law.[79] Discriminatory actions by states would also violate the equal protection clause. Although the Court has backed away from its earlier view that alienage is a protected classification, there can be no rational reason for imposing health measures on the basis of an individual's citizenship status, rather than exposure to disease. Moreover, should a pandemic strike, public health authorities will need the trust and cooperation of everyone. Discriminatory actions against non-citizens will invariably be counterproductive.

IV. Affirmative Measures: Preventing and Responding to Pandemics

Preventive Measures and Countermeasures

Prevention of disease is the primary goal of public health, and prevention of pandemics is the primary goal of pandemic flu planning. This requires a worldwide monitoring system to identify a potential flu pandemic early, and a response system that can—at least potentially—keep the outbreak localized. If an outbreak can be localized to one city, rural area, or town, for example, the strategy could be to isolate the area from the rest of the world, and saturate its population with anti-viral medication to try to confine the disease.

This is often termed the "ring" containment or "fire blanket" strategy. Almost all public health officials, however, believe that this strategy will fail, and at best will buy some extra time (weeks) for the rest of the world to prepare for a pandemic by, primarily, developing a vaccine against the new flu strain.[80]

Assuming it will take a minimum of four to six months to develop a flu-specific vaccine and manufacture enough of it to distribute, rationing decisions will have to be made in at least three major areas, two of which will involve direct government action: (1) distribution of existing stocks of anti-viral medications such as Tamiflu (which can be used for both treatment and prevention); (2) after a vaccine against the pandemic strain becomes available, distribution of the vaccine; and (3) when hospitals and other health care facilities reach their limits, determining who should have access to the next bed, ventilator, or other scarce medical intervention. The related question of whether and how much antiviral medication and/or ventilators government should stockpile is a political question.[81] For countermeasures in the hands of private physicians, clinics, and health plans, government will have to rely, as it did during the 2004 flu vaccine shortage, on voluntary cooperation—which has been effective when reasons for suggested rationing schemes seem medically appropriate.

It is worth noting that federal legislation has given vaccine manufacturers immunity for the vaccines they produce in response to a public health emergency. The CDC has also called for broad immunity statutes to protect "first responders" and unlicensed health professionals who respond to emergencies. These proposals are viewed as a form of "Good Samaritan" statute, but should be resisted in the pandemic setting for at least three reasons: (1) almost all of the people and corporations covered are not volunteers, but are doing a job that they have been trained for and are being paid for and should be accountable and responsible for their actions; (2) negligent Samaritans are no good—they harm rather than help; and (3) immunity encourages negligent and intentional violations of individual rights that breeds public distrust.

B. Acceptable (and Unacceptable) Ways to Ration Vaccination and Treatment

Medical rationing, such as deciding who gets the next heart for transplant, is an almost routine occurrence, and usually involves doing an initial screening based on medical criteria to determine if an individual can benefit from an intervention (like a heart transplant), and then putting the individual on a priority list—usually determined by a first-come, first-served basis. This scheme has developed because others, based on social worth, money, or personal influence (of the individual patient or physician) have been viewed as unfair. Likewise, a lottery system, although the fairest and most equitable, is usually perceived as simply too arbitrary, because it takes no account of medical need, individual desire, or probability of benefit. Similarly, in the emergency department, triage to determine who gets treated next is based on medical assessment of the need for immediate care and the probability that it will help, not on the wealth, race, or social status of the patient.

Emergency medical decision making will become de facto necessary in hospital settings (and other facilities used to house the sick) in the middle of any pandemic in which hospital beds are filled. Although there will be a temptation in a "public health emergency" to make micro-allocation decisions in this arena, these are fundamentally medical decisions that should remain with the treating physicians and their patients. This means that the decision about who should get next ventilator or ICU bed should be made by physicians following

basic medical ethics and triage rules. One important difference, however, is that with a highly contagious disease it will be necessary to take affirmative steps to prevent the spread of disease within hospitals, and this may require isolating parts of the hospital, or even setting up separate facilities for treatment.

Public health rationing of anti-viral medications and vaccines, on the other hand, involves populations, not individuals. Nonetheless, the ethical and legal considerations are similar, although instead of trying to save individual lives, one is trying to save large numbers of unidentified lives. A reasonable public health approach, and one most often advanced on the basis of efficiency or utility, is to allocate vaccine in a way that maximizes the total number of lives saved, or the total number of years of life saved. But these allocation schemes are likely to be unknowable at the beginning of a pandemic (e.g., when it is unknown which populations, such as infants, children, teens, or the elderly are most at risk). Also, while it is likely that almost everyone will want, and even demand, access to vaccine—the right to refuse to be vaccinated should be honored. No one should be forced to be vaccinated against their will both because of the constitutional right to refuse treatment, and pragmatically because forced vaccination will deter at least some people from seeking medical help when they need it.

Current U.S. government guidelines suggest that the highest priority for early vaccination be workers involved in vaccine production and medical and public health workers (since these individuals are needed to save others). Vaccine producers get priority because without them there would be no vaccine created for others; likewise, health care workers (and others directly involved in fighting the pandemic) get priority because of their role in helping others, and also because they risk their own lives in so doing. It will also be necessary to provide vaccine to the family members of these groups if we expect them to come to work.

The next tier usually contains those populations most at risk of death from the flu—the elderly—followed by other populations at risk. Others have argued that the elderly have lived their lives, and that priority should be given to younger people at risk. All of these schemes are legally sustainable, at least as long as they are made by publicly-accountable officials in a transparent manner. In order to obtain the support of the public for any rationing scheme, it must be developed prior to a pandemic, have broad public input, be reasonable, and be subject to revision as new information is obtained. What is not legally acceptable, however, is for the government to ration vaccine by race, religion, national origin, since this is a direct violation of the doctrine of equal protection.

Finally, government has the obligation to protect the health of all its citizen, but has special obligations to those in its custody and to those who cannot protect themselves because of physical or mental conditions. Government entities should do advance planning for vulnerable populations to prevent a recurrence of a "Katrina type" disaster where the most vulnerable were simply left to fend for themselves. Constitutional obligations to provide medical care, however, apply directly only to those actually in government custody, who should be near the top of any priority scheme for vaccination and treatment.

END NOTES

[1] Nations with Confirmed Cases H5N1 Avian Influenza, http://pandemicflu.gov/index.html.

[2] "Bush: Military may have to help if bird flu breaks out," CNN, October 5, 2007. Available at: http://www.cnn.com/2005/POLITICS/10/04/bush.avianflu/index.html.

[3] Wong Wai v. Williamson, 103 F. 1 (N.D. Cal. 1900).

[4] Jew Ho v. Williamson, 103 F. 10 (N.D. Cal.1900).

[5] John D. Arras, *The Fragile Web of Responsibility: AIDS and the Duty to Treat*, Hastings Center Report 8(Supp.) 10,19 (April/May 1988).

[6] Judith Walzer Leavitt, *Public Resistance or Cooperation: A Tale of Smallpox in Two Cities*, 1 Bioterrorism and Bioterrorism: Biodefense Strategy, Practice, and Science 185-192 (2003).

[7] Michael R. Albert, Kristen O. Ostheimer & Joel G. Breman, *The Last Smallpox Epidemic in Boston and the Vaccination Controversy*, 1901-1903, 344 New England Journal of Medicine 375 (2001).

[8] Jacobson v. Massachusetts, 197 U.S. 11 (1905).

[9] Buck v. Bell, 274 U.S. 185 (1927); Paul A. Lombardo, *Medicine, Eugenics and the Supreme Court: From Coercive Sterilization to Reproductive Freedom,* 13 Journal of Contemporary Health Law and Policy 1-25 (Fall 1996).

[10] TB is generally treated with isoniazid, rifampicin, pyrazinamide, or ethambutol. Drug-resistant TB is resistant to one drug. Multi-drug resistant TB (MDR-TB) is resistant to at least isoniazid and rifampicin. Extensively drug resistant TB (XDR-TB) is resistant to the most commonly used TB drug treatments. WHO, Tuberculosis, http://www.who.int/mediacentre/factsheets/fs104/en/index.html.

[11] Daniels v. Maricopa Co., CV-07-1080 (U.S. Dt.Ct., Dt. of Arizona).

[12] Quoted in Richard M. Nixon, Six Crises (1962).

[13] The Model Act is also discussed on Page 16.

[14] U.S. Department of Health and Human Services, Pandemic Influenza Plan (May 2007), http://www.hhs.gov/pandemicflu/plan/.

[15] Homeland Security Council, National Strategy for Pandemic Influenza: Implementation Plan (May 2006), http://www.whitehouse.gov/homeland/pandemic-influenza-implementation.html.

[16] Institute of Medicine, Workshop Summary, "Ethical and Legal Considerations in Mitigating Pandemic Disease" at 16 (2007).

[17] Homeland Security Presidential Directive/HSPD-21, "Public Health and Medical Preparedness," para. (34): Risk Awareness (October 18, 2007); http://www.whitehouse.gov/news/releases/2007/10/20071018-10.html.

[18] *Id.* at para. (38): Education and Training.

[19] *Id.* at para. (21), (22): Biosurveillance.

[20] Department of Health and Human Services, Draft Guidance on Allocating and Targeting Pandemic Influenza Vaccine (Oct. 23, 2007), http://pandemicflu.gov/vaccine/prioritization.html.

[21] Tech. & Privacy Advisory Comm., U.S. Dep't of Def., Safeguarding Privacy in the Fight Against Terrorism, at 49, www.cdt.org/security/usapatriot/200403000tapac.pdf.

[22] "Confidential" case reporting collects names and other PII. "Anonymous" case reporting does not collect names. Syndromic surveillance is discussed in section II.D *infra*.

[23] Public Health Service Act, §361, 42 U.S.C. §§264 -266, 269; 42 C.F.R. Parts 70 & 71. For laws affecting travel and border control, see Section IV *infra*.

[24] For a discussion of involuntary detention, *see* Section III *infra*.

See, e.g., Hill v. Nat'l Collegiate Athletic Ass'n, 865 P.2d 633, 658 (Cal. 1994); Alberts v. Devine, 479 N.E.2d 113, 118-19 (Mass. 1985).

[25] Whalen v. Roe, 429 U.S. 589, 599 (1977). Disclosure occurs (1) when government obtains information and (2) when it is redisclosed to other parties or accidentally or negligently disclosed to the public.

[26] Whalen v. Roe, 429 U.S. 589 (1977).

[27] Planned Parenthood of Central Missouri v. Danforth, 428 U.S. 52 (1976); Bellotti v. Baird, 443 U.S. 622 (1979); Planned Parenthood of Southeastern Pennsylvania v. Casey, 505 U.S. 833 (1992) *See also* Thornburgh v. American College of Obstetricians and Gynecologists, 476 U.S. 747 (1986)(striking down earlier Pennsylvania abortion reporting law that required personal information without names and made reports available to the public).

[28] *See* Tucson Woman's Clinic v. Eden, 371 F.3d 1173, 1179, 1192 (9th Cir. 2004); Walls v. City of Petersburg, 895 F.2d 188, 192 (4th Cir. 1990).

[29] *See, e.g.,* Sheets v. Salt Lake County, 45 F. 3d 1383, 1387 (10th Cir. 1995); Fraternal Order of Police, Lodge No. 5 v. City of Philadelphia, 812 F.2d 105, 110 (3d Cir. 1987).

[30] Cruzan v. Dir, Mo. Dep't of Health, 497 U.S. 261, 278 (1990); Vacco v. Quill, 521 U.S. 793, 797 (1997).

[31] 429 U.S. 589, 604, n. 32 (1974).

[32] United States v. Jacobson, 466 U.S. 109, 113 (1984).

[33] Soldal v. Cook County, Ill., 506 U.S. 56, 67 (1992).

[34] United States v. Miller, 425 U.S. 435 (1976). *See also* Smith v. Maryland, 422 U.S. 735 (1979).

[35] Ferguson v. City of Charleston, 532 U.S. 67, 79 (2001).

[36] Ferguson v. City of Charleston, 532 U.S. at 96 (Scalia, J., Rehnquist, C.J. and Thomas, J, dissenting).

[37] *See, e.g.*, Skinner v. Railway Labor Executives' Ass'n, 489 U.S. 602 (1989); Treasury Employees v. Van Raab, 489 U.S. 656 (1989); Bd. of Ed. v. Earls, 536 U.S. 822 (2002). *See also* O'Connor v. Ortega, 480 U.S. 709, 725 (1987).

[38] *See* Chandler v. Miller, 520 U.S. 305 (1997) ("where, as in this case, public safety is not genuinely in jeopardy, the Fourth Amendment precludes the suspicionless search, no matter how conveniently arranged.").

[39] *See* Tucson Woman's Clinic v. Eden, 371 F.3d 1173, 1179, 1192 (9th Cir. 2004); Decision of Chief ALJ Raymond Krause (July 3, 2007), http://www.oah.state.mn.us/aljBase/090017586.recon.htm.

[40] Standards for Privacy of Individually Identifiable Health Information, 45 C.F.R. Parts 160 & 164; 42 C.F.R. §164.512(b).

[41] David Brown, *Military's Role in Flu Pandemic: Troops Might be Used to 'Effect a Quarantine," Bush Says,* WASHINGTON POST, Oct. 5, 2005, at A05; Dept. of Health and Human Services, *Pandemic Influenza Implementation Plan, Pt. I*, Nov. 2006, at 102-304.

[42] 42 U.S.C. 264.

[43] 42 U.S.C. 264 (d).

[44] Ex. Or. 13375, 70 Fed. Reg. 17299 (April 11, 2005).

[45] 42 U.S.C. 5121

[46] P.L. 109-364, 120 Stat. 2083 (Oct. 17, 2006).

[47] *See* 42 C.F.R. 70 et seq.

[48] 70 FR 78192 at § 70.16 (Nov. 30, 2005).

[49] Jew Ho v. Williamson, 103 F. 10 (C.C.N.D. Cal. 1900).

[50] City of Newark v. J.S., 279 N.J. Super 178 (1993).

[51] Smith v. Avino, 91 F.3d 105 (11th Cir. 1995)(curfew following a hurricane).

[52] City of Newark v. J.S., 279 N.J. Super. 178 (1993).

[53] Greene v. Edwards, 263 S.E. 2d 661, 663 (1980)(construing state law).

[54] DeShanney v. Winnebago County Dep't Soc. Servs., 489 U.S. 189, 199-200(1989)

[55] Madeline Pelner Cosman, *Illegal Aliens and American Medicine,* 10 J. AMER. PHYSICIANS AND SURGEONS 6-8 (2005). *See also* Lawrence Downes, *Editorial Observer: When Demagogues Play the Leprosy Card, Watch Out,* NEW YORK TIMES, June 17, 2007 at http://select.nytimes.com/search/restricted/article?res=F70E11F63E5B0C748DDDAF0894DF404482.

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[57] World Health Assembly, WHA 58.3, Revision of the International Health Regulations, at http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_3-en.pdf (last visited August 10, 2007).

[58] *Id.* at Art. 12.

[59] *Id.* at Art. 23, Art. 31.

[60] *Id.* at Art. 31.

[61] *Id.* at Art. 32.

[62] *Id.* at Art. 43.

[63] Saenz v. Roe, 526 U.S. 489, 499 (1999).

[64] 381 U.S. 1, 15-16 (1965).

[65] John Lauerman, *Tough Laws Make Florida No-Fly Zone for Tuberculosis, (Update 1).* BLOOMBERG.COM, at http://www.bloomberg.com/apps/news?pid-20670001&ref=insurance&side=aqy5qiXQd6zQ (last visited August 8, 2007).

[66] *See* Section on isolation and quarantine.

[67] Miller v. Reed, 176 F.3d 1202, 1205 (9th Cir. 1999).

[68] 381 U.S. at 14 (citing Kent v. Dulles, 356 U.S. 115, 125 (1958)).

[69] Califano v. Aznavorian, 439 U.S. 170, 176-77 (1978).

[70] Regan v. Wald, 468 U.S. 222 (1984); Zemel v. Rusk, 381 U.S. 1 (1965).

[71] Weinstein v. Albright, 261 F.3d 127 (2d Cir. 2001).

[72] Rahman v. Chertoff, 2007 U.S. Dist. Lexis 54960 (N.D. Ill. 2007).

[73] United States v. Montoya de Hernandez, 473 U.S. 531 (1985).

[74] Rodriguez-Silvia v. INS, 242 F.3d 243, 246 (5th Cir., 2001).

[75] 8 U.S.C. 1182.

[76] United States v. Flores-Montano, 541 U.S. 149 (2004).

[77] *See* 2007 U.S. Dist. Lexis at 54960.

[78] Haitian Centers Council, Inc. v. Sale, 823 F. Supp. 1028 (E.D. N.Y. 1993), vacated by Stipulated Order Approving Class Action Settlement Agreement (Feb. 22, 1994) (refugees taken into custody on the high seas could not be denied medical care nor detained indefinitely)

[79] Lozano v. City of Hazelton, 2007 U.S. Dist. LEXIS 54320 * 125-26 (M.D. Pa. , July 26, 2007).

[80] Emanuel EJ & Wertheimer A. *Who Should Get Influenza Vaccine When Not All Can,* .312 SCIENCE 854 (2006) US Dept. HHS, PANDEMIC INFLUENZA PLAN, Table D-1, Vaccine Priority Group Recommendations (2006).

[81] WHO, Equitable Access to Therapeutic and Prophylactic Measures (Working Group One, Project on Addressing Ethical Issues in Pandemic Influenza Planning), Draft report, June 22, 2006.
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