

Assessing the Legacy of Post-9/11 Public Health: Lessons for Obama-era Health Reform

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Torture, detention, government surveillance and secrecy—these are the legacies of the Bush Administration that have received the most press and attention, the most egregious areas of Bush era war-mongering, surveillance and abrogation of civil rights. For many progressive critics, the Obama Administration has not given sufficient attention to overturning these, letting them linger into the "new era". Worrisome as these particular issues are, they barely scratch the surface of the numerous drastic changes—many of which were much less visible if no less impactful—that occurred over the two-term Bush presidency. Deserving close scrutiny are the changes that occurred in public health. Concerned with improving quality of life and well-being, the public health field is an arena with sweeping impact across the entire U.S. population. While Obama's health insurance overhaul¹ to broaden access and coverage to U.S. healthcare is no small feat, broader issues of public health remain unaddressed and moreover, constitute a continuation of many of the problematized Bush era changes in the sector. It is imperative to take a closer look at the Bush era legacy of public health in order to understand and frame the important discussions that need to take place with respect to the challenges facing the Obama Administration in public health.

While the shifts in public health spearheaded by the Bush Administration in the post-9/11 securitized U.S. politic by no means appeared out of historical context, they were precipitated to a degree not seen in recent eras. Disease control was a primary focus during the Bush era, and public health turned its attention specifically to preparedness programs for the rare, catastrophic diseases of “bioterrorism” and pandemics. Like much of the policies instantiated during the Bush era, this new health orientation must be contextualized within the pervasive fear-mongering that characterized the post-9/11 climate in the U.S.; from within the federal government to the news media, to myriad other social institutions and civic organizations, U.S. society was dominated by national security discourse and had become thoroughly fixated on threats of all kinds. In the backdrop of the anthrax mailings (which killed five and injured an additional seventeen) subsequent to the September 11 attacks, "bioterrorism" had become a key concern, and preparedness for a possible biological warfare attack a focus in the government, mass media and other sectors. Moreover, disease threats in general became a focal point of anxiety, reflected in the disease scares that became frequent during this era—i.e., anthrax in 2001, smallpox in 2002, SARS in 2003, “bird flu” in 2004. In this context, public health (the field primarily responsible for handling disease epidemics, including from a biological attack) received an influx of resources and attention, shaping the ways in which disease control, healthcare and public safety were implemented in the U.S.

In assessing this Bush era legacy, there are five key areas of post-9/11 public health that need to be addressed: 1) the "securitization" of public health; 2) an expanded "biodefense" industry; 3) militaristic, xenophobic and pharmaceutically-dependent pandemic planning; 4) representations of disease carriers as "Middle Eastern bioterrorists" and unhygienic East/Southeast Asians; and

¹ The Patient Protection and Affordable Care Act was signed by Obama on March 23, 2010. This was covered in the special issue of *Journal of Health Politics Policy and Law* (August 2009 Volume 34, Issue 4).

5) women, disease control and biodefense.

I. The "securitization" of public health

The "securitization" of public health has entailed the shift of scarce resources (personnel, funding, medical research and development) to bioterrorism preparedness.

Public health during the Bush era became "securitized"—determined by the national security orientation of the post-9/11 climate of which it was a part. Growing concern with "bioterrorism", centered on the anthrax "attacks" in 2001, resulted in an influx of funding as well as a shift in public health to bolstering infectious disease management in the U.S. —with a particular focus on the prevention of diseases associated with bioterrorism (e.g., anthrax, smallpox). The Public Health Security and Bioterrorism Preparedness Response Act of 2002 was passed to ensure that ample resources were put towards enhancing public health preparedness for a possible biological attack. The federal government allocated increased funding to this endeavor: in the budget for 2003, President Bush called for \$5.9 billion for defenses against biological terrorism (infrastructure, response systems, research and development, etc.), an increase of more than 300 percent from the prior year; and Congress allocated a large portion of this (\$4.4 billion) to the Department of Health and Human Services (DHHS).

This influx of capital into public health in the name of bioterrorism response was met with mixed reactions in public health. While many welcomed the resources given to a field that had been in decline for decades in the U.S., others, especially as emphasis became placed on the study and prevention of diseases associated with bioterrorism, argued against what they considered to be a diversion of public health priorities (Guidotti 2004; King 2005). Several prominent public health pundits, such as Victor W. Sidel, Hillel W. Cohen and Robert M. Gould, called this a "cooptation of public health", and argued instead that "investment of these [anti-bioterrorism] funds in programs to improve education, nutrition, housing, and other measures for disease prevention for the world's peoples is likely to be far more useful..." (Sidel et al. 2002). Widespread resistance to the changing orientation in public health emerged in response to one particular action—the Smallpox Vaccination Program, a preparedness plan launched in November of 2002 for a potential smallpox attack². The plan entailed the preemptive vaccination of up to ten million health care personnel and other first responders—medical professionals, emergency personnel and response teams who would be the first to have to respond during an ensuing epidemic (GAO 2003a). The plan never fully got off the ground since the public health sector showed significant resistance to participating in it, both because of the medical risks to vaccine recipients and community exposure to the vaccine³, and because the Program siphoned much needed personnel and disease control resources from more traditional and important public health needs (e.g., access to healthcare, treatment and prevention programs for chronic disease such as AIDS,

² A smallpox attack was a very low probability event since the only two known countries to even possess any smallpox virus remaining after the disease was eradicated globally in 1979 is the U.S. and Russia. President Bush would inaugurate the Smallpox Vaccination Program with the explanation that although "our government has no information that a smallpox attack is imminent....it is prudent to prepare for the possibility that terrorists would kill indiscriminately — who kill indiscriminately — would use diseases as a weapon" (Bush 2002).

³ The vaccinia virus on which the vaccine for smallpox is based has the highest complication rate of any vaccine ("Expected" 2002), and can easily spread from recent vaccinees to those with weakened immune systems and skin disorders like eczema (for a more comprehensive list on the risks of the vaccine for smallpox ("Frequently" 2007).

environmental health and safety, etc.).

This balking at the Smallpox Vaccination Program put into sharp relief the larger tensions between the public health sector and a post-9/11 national security apparatus newly empowered to direct it. In November of 2002, the Department of Homeland Security was formed (authorized by the Homeland Security Act) to absorb under its purview multiple domains—from customs and immigration to public health. The consequent restructuring of public health to the neoconservative agenda of the Bush Administration frames many of the health policies during this era. Regarding the Smallpox Vaccination Program, for example, the influential health think tank the Institute of Medicine noted the link between the disease control program and the newfound focus on "terrorism": "The national Smallpox Vaccination Program announced on December 13, 2002, was the result of an extraordinary policy decision: to vaccinate people against a disease that does not exist with a vaccine that poses some well-known risks. The rationale for such a decision can be considered only against the backdrop of the terrorist and bioterrorist attacks of 2001" (IOM 2005). In this piece I advocate for an inventory of changes such as these that occurred during the Bush era, in order to assess the degree to which public health priorities have been diverted from the everyday health needs of the public. As public health continues to receive attention—and the recent health insurance overhaul is just one drop in the bucket of the myriad health issues facing U.S. populations—traditionally important public health goals such as addressing chronic illnesses and long-term health treatment programs must not fall by the wayside due to an overemphasis on either national security programs or emergency planning for rare catastrophes like pandemics.

II. An expanded "biodefense" industry

Increased production of emergency drugs and disease countermeasures in the form of an expanded (and largely corporate) "biodefense" industry poses a threat to public safety.

A significant component of the securitization of public health that occurred during the Bush era entailed the increased production of emergency drugs in the form of vaccines, antivirals and other treatments to counter disease epidemics in the wake of a possible bioterrorism or biowarfare attack. While some of this increased research and development took place a few years prior under the Clinton Administration⁴, production accelerated dramatically in the post-9/11 era. In addition to an increase in this research in the biological and biomedical sectors, much of the federal funding for research and development of countermeasures to bioterror attacks has been allocated to the national security sector—more specifically, the "biodefense"⁵ industry, which resulted in its significant expansion. From about \$1.4 billion in 2001 to about \$5 billion in 2002, by 2004 federal funding for biodefense had reached over \$7 billion ("Budget" 2003; Kozaryn 2002; "HHS Fact Sheet" 2004; Fauci 2002a). From fiscal year 2001 to 2009, nearly \$50 billion has been spent on biodefense ("Federal Funding" 2008).

⁴ "Biodefense" was an increasingly emphasized priority during the Clinton Administration, such that by the end of the 1990's the Centers for Disease Control and Prevention (CDC) had implemented a "Bioterrorism Preparedness and response Program" to improve disease surveillance and drug production in the event of a bioterror attack.

⁵ "Biodefense" is an enterprise that was begun at the end of U.S. termination of its offensive biological weapons program in 1969, in order to continue research on biological weapons and other dangerous diseases (for the expressed purpose of defense against a biological weapons attack and other disease threats). This work entails researching and experimenting with dangerous pathogens—creating defenses and new pathogens to test against them—and takes place in high-level restricted-access laboratories by security-cleared scientists (King 2005).

Disregarding for a moment the question of the utility of such research and development in effectively countering disease, the health threats posed by the post-9/11 expansion of "biodefense" warrants considerable attention, not least because it has increasingly taken place in private industry as well as academic centers, in addition to the dedicated federal government labs that are its official domain. Due to laboratory risks such as lab accidents, leakages of materials and other unintentionally-produced hazards, this increased "biodefense" research being conducted on dangerous pathogens (i.e., those potentially useful to perpetrate a "bioterror" attack)—and in non-governmental sectors—poses grave danger to not only laboratory workers but also the general public. The CDC has recorded about 20 accident reports of infectious pathogens a year since 2004, and this has only increased (for instance, 32 reports were reported from April to September of 2007); moreover, many believe that these numbers are vastly underreported (Kaiser 2007). In fact, Fort Detrick (the hub of the U.S. government's biodefense research and development), which was implicated as the source of the anthrax used in the "attacks" of 2001, has been the site of multiple lab leakages of dangerous pathogens misplaced during the lax security and internal strife taking place there in the 1990's (Ridgeway 2002; Weiss and Warrick 2002; Sunshine 2006). Despite these cautionary tales, since 2002, the number of similar high-level federal biosafety labs—often embedded within corporate and academic labs—to conduct such research has only increased⁶.

Protocols, agreements and international treaties do exist to address some of these safety issues, but they are insufficient. Particularly since the anthrax scare brought widespread attention to bioterrorism as well as revealed lab leakages and other biosafety issues at many high-level government laboratories, "biosecurity" has been emphasized as one mechanism to address the hazards posed by this research. However, these "biosecurity" measures⁷ have in the post-9/11 period been mainly focused on guarding and restricting access to this research rather than on traditional laboratory biosafety protocols which focus on, for example, sterile technique, proper disposal of hazards, etc. Moreover, despite highlighting the danger posed by this research—that it could potentially be used to make biological weaponry, the U.S. government has contradictorily repudiated the international treaty to safeguard it—i.e., the Biological and Toxins Weapons Convention (BTWC) of 1972, which prohibits the build up and possession of biological weaponry, unless in the name of defense. The BTWC undergoes periodic review and ratification, and at its fifth review in 2001 the U.S. argued that the inspections would burden university and private industry by way of proprietary rights and possible theft of commercial secrets (Findlay 2006). U.S. rebuking of the BTWC is particularly troubling since the adherence requirements are not all that stringent to begin with: it is a slippery slope from creating defensive weapons to offensive weapons since biological weapons research can easily be applied to make bioweapons as much as countermeasures against them (Atlas and Dando 2006; CRG 2003). Thus, U.S. "biodefense" research, despite its justification as part of national defense and as beneficial to public health goals of disease control, is markedly dangerous to public safety, both in the U.S. as well as the international community. As we consider the effects of the expansion of the U.S. "biodefense" industry during the post-9/11 period—the culmination of some of the

⁶ For example, to the four BSL-4 (the highest-level of containment) laboratories in the U.S. existing to the U.S. in 2001 were added another three by 2006, with another three slated for completion by 2008 (Gronvall et al. 2007).

⁷ "Biosecurity" measures have, for example, been set by the government's National Science Advisory Board for Biosecurity (NSABB) or the American Association for the Advancement of Science (AAAS).

U.S.'s most imperialist and dictatorial tendencies in its history, we must then contextualize it within the U.S. government's failure to adhere to the politics of international disarmament and the consequential threat to public health.

III. Militaristic, Xenophobic and Pharmaceutically-dependent Pandemic Planning

The development of disease control plans—particularly in relation to pandemic preparedness—relies on methods that have proven to be ineffective: law enforcement; border control; and pharmaceutical production.

Following the initial public health focus on bioterrorism, the post-9/11 era saw an increased emphasis on preparation for pandemics⁸. The SARS scare in 2003 and the "bird flu" in 2004 embodied these fears, which followed closely upon the heels of the earlier bioterror scares of anthrax in 2001 and smallpox in 2002. Yet, national security still framed this spectre of pandemics: when SARS first emerged it was investigated as to whether it might be the result of bioterrorism; when "bird flu" emerged it was questioned as to whether it might eventually be adapted to become used as a bioweapon. More importantly, the frequent disease scares provided the backdrop in which unrealistic disease control measures relying on pharmaceutical companies, law enforcement and border control were developed. Disease control plans were the subject of debate during each of the post-9/11 disease scares—from anthrax to smallpox and SARS, and by the time the "bird flu" scare came around in 2005, elaborate federal plans had been developed⁹ to manage an influenza pandemic should one occur.

Foremost, pharmaceutical products (e.g., vaccines¹⁰ and antiviral drugs¹¹) were the backbone of disease control planning. In July of 2004 Project BIOSHIELD, an ambitious research project allocating \$5.6 billion to drug companies over ten years to produce vaccines and other drugs for biodefense, was passed in an Act of Congress. Subsequently, in December of 2006 the "Pandemic and All-Hazards Preparedness Act" was passed, creating the Biomedical Advanced Research and Development Authority, an agency of the Department of Health and Human Services set up to devote \$1.07 billion over two years towards the production of disease countermeasures for "emergencies" such as bioterrorism and pandemics. Largely unquestioned, this pharmaceutical production in disease control efforts is problematic for two reasons. First, many of these products are used with limited success, yet pharmaceutical production tends to focus on increasing the production of or on making more enhanced versions of these products. For instance, the emphasis on production and stockpiling of vaccines for flu, a mainstay of the federal flu plans, is belied by the known problems of flu vaccine—the variability of the flu virus quickly renders existing vaccines useless (at providing anything but general immunity¹² to a new pandemic). But approximately one-quarter—\$2.8—of Bush's \$7.1 billion budget for his

⁸ A "pandemic" disease is generally defined as an epidemic (a rapidly spreading outbreak) that spreads over a wide geographic area.

⁹ There were three federal plans: President's *National Strategy for Pandemic Influenza*, November 1, 2005; Department of Health and Human Services' (HHS) *Pandemic Influenza Plan*, November 2, 2005; and *National Strategy for Pandemic Influenza: Implementation Plan*, May 3, 2006.

¹⁰ Vaccines are used primarily as preventive measures since they work by stimulating antibodies against infectious agents.

¹¹ Antiviral drugs are used primarily as treatments against a virus which has already attacked a host.

¹² Vaccines are most effective when applied to the specific strain from which they were developed; however vaccines may be able to confer some degree of immunity to other related strains (MacKenzie 2006).

pandemic flu preparedness plan was devoted to developing new vaccine production technology (that would improve the timeliness and shelf-life of vaccines). Because of the limited efficacy of these products, focus should instead be placed on improving mechanisms for the (equitable) distribution of existing products, not to mention improving the health immunity of the public through more long-term, systemic means (for example, improving nutrition and healthcare services). Second, and related to the first point, the misplaced emphasis on increased drug technologies in current disease control planning is tied to the economics of drug production—i.e., the powerful pharmaceutical companies. Since the 1980's, after a series of laws was passed promoting pharmaceutical companies' interests, this industry has become the most powerful government lobby, spending more than \$675 million on lobbying over the past seven years (Ismail 2005). In the post-9/11 climate, the place of the corporate sector in U.S. disease control measures reflected this large lobbying power—both Bioshield and the subsequent Pandemic Act, for example, contained stipulations about liability protections against any side effects from pharmaceutical products¹³. This government-backed pharmaceutical production circumscribes the parameters of disease control planning and reveals the tension between the goals of public health and the profit motive of corporate-driven pharmaceutical production.

An equally troubling aspect of post-9/11 disease control planning was the facility with which the military and law enforcement could be called upon in the event of a biological attack, as well as a general epidemic or pandemic. The federal flu plans outlined a pronounced role for law enforcement: federal law enforcement and the Department of Defense (DOD) were to assist local and state level authorities in enforcing containment measures such as isolation and quarantine, border and transport restrictions; and the military was designated to provide support in pandemic control activities. The federal flu plans were followed by Bush's Homeland Security Presidential Directive (HSPD-21) in October of 2007, which solidified the role of the military in public health governance by merging Department of Health and Human Services and DOD authorities in the handling of "catastrophic health events", i.e., "a terrorist attack with weapons of mass destruction (WMD), a naturally-occurring pandemic, or a calamitous meteorological or geological event" ("Homeland" 2007); moreover, they were funded by budgetary resources allocated through the John Warner National Defense Authorization Act for Fiscal Year 2007 ("John" 2007). Using law enforcement or the military in a pandemic tends to have a negative effect on public trust, since their policing mode is distinctly harsher than the milder ways in which health workers perform their duties. Public cooperation (and information) is essential to disease control, especially during a pandemic when mass panic is at its height; historical studies have bore out the fact that using force to contain and stop the spread of disease is ineffective at best and has negative effects at worst (Annas et al. 2008; Center 2006; Fox 2006).

This militaristic mode of disease control is especially worrisome given the fact that border control was another prominent aspect of post-9/11 disease control planning. Xenophobic disease control measures characterized the rash of disease scares that followed the September 11 attacks. Beginning with the early fingerpointing at "Middle Eastern terrorists" during the anthrax scare, and similarly during the smallpox scare, the SARS and "bird flu" scares embodied fully the fears in the U.S. of the potential contagion of diseases from abroad (in this case, from East/Southeast Asia). Increased screening at U.S. borders, travel warnings and use of quarantine during the

¹³ The rationale given was that the industry required such government incentives to be encouraged to partake in the less profitable bioterror/pandemic drug market (because bioterror attacks and pandemics are low probability events).

SARS and "bird flu" scares revitalized disease control mechanisms which had not been seen in decades. For example, after the SARS scare, quarantine stations which had long since fallen into disuse were revived by the CDC at major airports, and new ones were added. Many of these stations had been dismantled because of the common perception in the 1970's in the U.S. that infectious disease threats were a thing of the past, and until SARS only eight stations remained; after SARS, ten new stations were opened from the beginning of 2004 to the end of 2005, and the total count was twenty by the end of 2007. Historically, these border patrol and health surveillance mechanisms have played a role in discrimination based on gender, ethnicity and nationality. The renewed use of such potentially discriminatory measures is difficult to justify, especially given problems with efficacy—follow-up studies of SARS showed that border screening did not help mitigate its spread (CDC 2006) and would be even less effective in preventing flu spread due to the short incubation period of the flu virus before it becomes contagious; nevertheless, these methods were inculcated in the era's long-range federal flu plans. The unrealistic reliance on disease containment at national borders misses the boat on appropriate measures to address disease spread in the U.S. as well as globally—what is required is the improvement of U.S. public health infrastructure and the promotion of cooperative transnational health actions.

IV. Representations of Disease Carriers: "Middle Eastern bioterrorists" and Unhygienic East/Southeast Asians

Racist and xenophobic representations have re-emerged of Asians as disease carriers (East and Southeast Asians) and "bioterrorists" (Arabs and Muslims).

One of the most problematic aspects of Bush-era public health was the furthering of racist and Orientalist discourse about disease carriers. During the disease scares and the associated disease control measures, Orientalist imagery of "Middle Eastern" (i.e., Muslim, of Arab descent, of South Asian descent) men as bioterrorists on the one hand and "Asians" (i.e., people of East and Southeast Asian descent¹⁴) as diseased and unhygienic on the other pervaded the mass media, government and public health discourse. The former was associated with anthrax, smallpox, and other diseases used for bioterrorism, the latter with SARS and "bird flu", diseases thought to have pandemic potential. Both types of representations of disease carriers are heavily steeped in understandings of disease spread and national security that are imbued with racist and Orientalist overtones. Seen as prone to disease and/or prone to violence, the "Middle Eastern bioterrorist" and Chinese/Asian disease carrier, while embodying fears over public health security and global relations (disease spread, transnational/international travel, increased immigration etc.), serve to further ideas of a normative U.S. "nation" that excludes the "Middle Eastern" or "Asian" Other. This has had the negative consequence of xenophobic treatment of foreign populations as well as residents of the U.S. who are of recognizably Asian descent. This targeting has not only affected the health and well-being of these groups in particular, but also has jeopardized the health of the entire U.S. population by squandering attention on misplaced signs of danger.

¹⁴ As a result of recent geopolitical and socio-political history, "Asians" in current context designates those of East Asian—Japan, China, Korea—descent and Southeast Asian—Singapore, Malaysia, Vietnam, etc.—descent. Moreover, "Chinese" has historically been utilized as a sort of general stand-in for "Asians"; and "Asian" and "Chinese" are often used uncritically and interchangeably.

In the first instance, "Middle Eastern" men were associated with bioterrorism just as they were with terrorism in general¹⁵. During the bioterrorism-focused anthrax and smallpox scares, it was the Middle East—be that countries (like Iraq), groups (like Al Qaeda) or individuals (like Arab-Americans)—that was the focus of speculated culpability. During the anthrax scare, Al Qaeda and Iraq were focused upon as the primary suspects¹⁶, even after this speculation was quickly contradicted by the evidence gathered in the FBI investigation tracing the source of the anthrax strain used in the mailings to a U.S. federal bio-lab and pointing to the likely perpetrator as a white male scientist working at such a lab¹⁷. Similarly during the smallpox scare, Iraq and terrorists (presumed "Middle Eastern") were again pointed to as the likely perpetrators of a potentially catastrophic—if extremely unlikely—attack utilizing smallpox. This "Middle Eastern bioterrorist" construct brought to the fore not only the elaborate ways in which "Middle Eastern" had become a focus of U.S. national security, but also the way in which disease and how it spreads had become framed by the terms of national security.

In the second instance, the figure of the unhygienic "Asian"—a historically-salient trope typifying the normative disease carrier¹⁸—was revived during the SARS and "bird flu" scares. In the backdrop of over a decade of competitive U.S.-China relations, diseases emerging in China and Southeast Asia readily invoked Orientalist representations in U.S. public health discourse of unhygienic "Asians" posing the threat of disease spread globally (and to the U.S.). The SARS scare most evidenced the perceived threat posed by China/Asia and Chinese/Asians: in addition to the prominent U.S. CDC issued travel alerts and advisories about travel to (and in some instances from) SARS-affected countries—applied most severely to Asian regions (CDC 2003a), discrimination directed at Chinese and Asians occurred throughout U.S. society. From the—thankfully short-lived—UC Berkeley ban on students from China, Taiwan, Hong Kong and Singapore in attending its summer programs to the turning away of Chinese-American performance artists and taunts directed at Chinese-American children on the playground (Newman and Zhao 2003), being Chinese or of Chinese descent was proof enough for stigmatization as presumably infected. News media, in addition to only slightly more tempered medical journals articles, that described China as an exotic and backward place whose cultural practices—consumption practices in particular—were "squalid" and bred germs certainly did not help matters. (U.S. flu preparedness plans also evidenced this stigmatization—suggesting containment of the disease in Asia as a viable disease control measure.) This resurgence of Orientalist perception of Chinese/Asians as diseased not only illustrated larger geopolitical and

¹⁵ If the post-9/11 period saw the height of this notion of "Middle Eastern terrorism", the roots of such discourse can be traced back to as early as the 1970's (Naber 2008).

¹⁶ During the anthrax scare and subsequent investigation, government officials such as Dick Cheney were quoted as saying that Al Qaeda "actually used to train people" in "how to deploy and use these kinds of substances [biological and chemical weapons]" ("The Anthrax Source" 2001) and Secretary of Health and Human Services Tommy Thompson speculated "Is it Al Qaeda?" (Schmemmann 2001). In addition, former weapons inspector Dick Spertzel was quoted as saying that "There are people in Iraq who know how to do it" ("The Anthrax War" 2001).

¹⁷ This persistent profiling of a "Middle Eastern" suspect is especially telling since about 85% of biological crimes in the twentieth century were perpetrated by white males (Carus 2001).

¹⁸ The perception of Chinese/Asians (amongst other marginalized groups) in the U.S. as disease-prone peoples has a long history. The quarantining of San Francisco Chinatown for several months in 1900 after the discovery of one Chinese man suspected to have died from plague is one such example of this history (Shah 2001; Leavitt 1997); Chinese and other Asians residing in the U.S. have continued (in some ways parallel to "Middle Eastern" peoples) to be seen as the perpetual foreign Other—perpetual immigrants no matter how many generations—to the U.S. nation (Lowe 1998).

global health concerns in the U.S., but also, in the context of fears around bioterrorism, served to mark Chinese/Asians as a public health threat inscribed by the terms of U.S. national security. As disease had become increasingly discussed in relation to bioterrorism (for example, the speculation that SARS might be of bioterrorist origin), so too did populations associated with disease—i.e., Chinese/Asians in this case—become viewed as potential national security threats.

V. Women, Disease Control and Biodefense

Disease control planning and "biodefense" measures take an unspoken toll on women due to their roles as primary caregivers and front-line healthcare workers.

Another population that was significantly, if less conspicuously, affected by Bush era public health policy was women. Due to the gendered division of labor in the U.S., women have always played an important role in public health, both as healthcare professionals and in their familial roles as informal caregivers (Grosz 1994). Disease control planning in particular relies heavily upon the predominantly female domain (approximately four-fifths) of "frontline" healthcare work (nurses and other medical professionals, emergency personnel and response teams who are the first to respond to an epidemic)¹⁹, ("Workers" 2006). The emphasis given disease control endeavors in the post-9/11 era not only called upon women in these healthcare roles to prepare for potential epidemics—as well as the more severe pandemics—but also as key figures in the biodefense preparedness plans that had increasingly become the purview of public health during that time.

Returning for a moment to the Smallpox Vaccination Program, this is a poignant example of women's principal roles in public health and biodefense. Pushed through with the security-oriented urgency of "biodefense", the vaccination program in preparation for a smallpox attack was a hasty, careless public health measure that ended up enlisting women at undue expense to their own health. Implemented on a health worker population that was majority (approximately two-thirds) female, the vaccination program ended up causing side effects in just over 2% of its vaccinees, three-quarters of whom were female (Casey et al. 2005; Poland 2005; CDC 2003). Historically, disease control measures have often entailed the displacement of the risks of public health measures onto women (particularly women of color, immigrant women, lower-class and disabled women)—they have been subject to health surveillance as mothers, domestic housekeepers and sex workers, and at times even used as guinea pigs for experimental medical testing (Leavitt 1997; Shah 1999; Briggs 2002; Adams and Pigg 2005). In the context of post-9/11 disease control planning, ensconced in a national security framework as much if not more than a public health framework, the Smallpox Vaccination Program not surprisingly failed to give adequate consideration to the effects on populations historically-overburdened in public health (such as women).

It is noteworthy that representations (in the mass media, in public health debates, in national security discourse) of women as a vulnerable civilian population—as objects needing protection

¹⁹ This domain is also disproportionately populated by women of color (approximately one-third, more than three times their numbers in the U.S. population as a whole) ("Workers" 2006).

from a biological attack²⁰, contradicted their actual status as one of the populations most vulnerable to the collateral damage of Bush-era disease control initiatives. Women, both in their roles as front-line healthcare workers and as the primary informal caregivers in families and communities, bear this hidden burden of disease control, and in the post-9/11 plans this was made more extreme by the hastily applied biodefense-inflected disease control measures. The existing structural inequality in public health reflected in (majority-female) front-line health worker exposure to disease is only exacerbated by their surreptitious enlistment into biodefense initiatives; and the mission of public health to protect all members of the national population is belied by this neglect of the well-being of careworkers and women who informally and formally do the majority of care work.

CONCLUSION: Changing the Path of Post-9/11 Public Health

Towards democratic health policy, biological disarmament, humanistic disease planning, informed public discourse, and equitable care.

The changes to public health during the Bush era—some of which were new, some merely a culmination of trends in public health from earlier periods—certainly warrant attention as we assess the direction of the Obama-led era of "change". Post-9/11 public health resources were focused on unlikely catastrophes like biological attacks and pandemics rather than on everyday health ailments the majority in the U.S. face; on dangerous "defensive" research against these highly unlikely events rather than on mitigating the existing dangers posed by biological research laboratories; on building up methods of disease control that were already known to be ineffective (e.g., the use of force, discrimination and relying on a pharmaceutical industry shown not to have the public interest in mind); on fanning racist and xenophobic notions of disease spread rather than on promoting informed and inclusive public health; and on further exploitation of women, who already bear an unfair burden of the risks of healthcare, rather than on working to rid healthcare of its sexist division of labor. I conclude by discussing some of the actions taken thus far by the Obama Administration with respect to each of these issues.

Desecuritizing Health: It is my hope that the Obama Administration will, beyond addressing health insurance coverage, reverse the "securitization" of public health and redirect public health resources back to more commonplace public health priorities. The Obama Administration has certainly begun to shift away from emphasis on bioterrorism preparedness and towards less national security-focused disease threats.. In May 2009 Congress approved an Obama-initiated transfer of Bioshield funds (amounting to almost half a billion dollars²¹) to research and development for pandemic influenza preparedness and response in the Omnibus Appropriations Act (P.L. 111-8). Further signaling this move away from a national security rubric of public health, at the end of 2009 Obama placed Bioshield funds management under the purview of Health and Human Services rather than Homeland Security. In June and July 2010, Obama initiated a significant redirection of public health towards focus on chronic, everyday disease—first releasing an executive order establishing the “National Prevention, Health Promotion, and Public Health Council” and subsequently releasing the first ever nationwide strategy for

²⁰ Women were represented in mainstream post-9/11 U.S. discourse as, amongst other delineations, housewives who were afraid to open their mail after the anthrax attacks, mothers worried about the effects of a bioterror attack or a pandemic on their children, and panicked consumers hoarding face masks and other bio-preparedness paraphernalia.

²¹ President Obama plans to continue transferring funds out of this account (Gotttron 2010).

HIV/AIDS prevention. At a very basic rhetorical level as well, the emphasis on bioterrorism—and terrorism in general—has drastically subsided (one need only look at the new whitehouse.gov website under "homeland security" to witness the cursory attention terrorism is now given).

Biological Disarmament: The Obama Administration should take steps towards shrinking the biodefense industry. Currently, the explosion in dangerous biological research continues, safeguarded only by biosecurity access restrictions and biosafety guidelines focused on preventing everyday laboratory threats (e.g., spills and leakages). In addition to drastically reducing the size of this industry, the Obama Administration should endorse the international monitoring system of the Biological and Toxins Weapons Convention—i.e., verification protocols that monitor compliance (of the U.S. and other signatory countries) with the ban on pursuing dangerous biological research. Unfortunately, like the Bush Administration, the Obama Administration has indicated in the August 2010 preliminary meeting of the BTWC that it will not endorse verification protocols—citing difficulties in assessing the nature of biological research as offensive versus defensive (the earlier Administration had cited industry proprietary interests). Unless the Obama Administration reverses course at the official 2011 BTWC meeting and supports the biological weapons ban fully, it will lead once again to a politics of U.S. isolationism, instead of international cooperation.

Humanistic Disease Planning: The Obama Administration should implement disease control measures that treat U.S. populations in an egalitarian, cooperative manner. As we have seen with the "swine flu"²² scare that occurred in 2009, disease control continues to be a salient feature of contemporary U.S. politics. Arriving in April, H1N1 flu was declared a public health emergency by Obama in October, and after proving not as deadly as feared (about 12,000 deaths worldwide were attributed to it—about one third of annual deaths from seasonal flu), by June of 2010 was declared not a threat in the U.S. (and subsequently by the WHO in August). This recent disease scare was met with a notably more moderate—and less national security-inflected—response than occurred during the previous Administration in response to anthrax, smallpox, SARS or "bird flu". The Obama Administration did not implement many of the problematic measures advocated in the pandemic flu plans drawn up by the Bush Administration in 2005 and 2006, foregoing their reliance on militaristic and xenophobic preparedness measures. For example, the Obama Administration refused to ban international travel and close borders in response to H1N1. In addition, the Administration scrapped plans to revamp and implement stricter quarantine regulations, as well as plans to involve military support in controlling potential H1N1 outbreaks. However, the Obama Administration has continued to rely on pharmaceuticals in its disease control response, pushing forward with a government-funded vaccination plan for H1N1 towards the end of 2009 that produced an excess of vaccine. The government order of amplified vaccine production proved not only unnecessary (and wasted) with the resulting lower occurrence of actual flu deaths, but vaccine production itself proved to take too long to be useful (one of the criticisms of pharmaceutical measures in response to a fast-changing mutable microbe such as influenza). In addition, the flu preparedness plans drawn up by the Bush Administration in 2005 and 2006 are still in place, and vigilance should be maintained as to the

²² This hybrid avian-swine-human flu virus—more accurately known as H1N1—is technically not a "swine flu" as it actually afflicts humans and not pigs.

degree to which they will guide future disease control planning.

Informed Public Discourse: The Obama Administration needs to take drastic measures to counter the U.S.'s historically racialized xenophobic discourse and disease control response. The degree to which racialized xenophobia characterizes U.S. disease control discourse was demonstrated most recently by the stigmatization of Mexicans during the recent "swine flu" scare. The rampant post-9/11 xenophobia towards "Middle Eastern" and "Asian" people as "bioterrorists" or disease carriers that I have discussed has continued to differing degrees in the contemporary era. On the one hand, President Obama has made rhetorical attempts to address deeply engrained racism and xenophobia in the U.S. towards the "Middle East"—e.g., in Obama's June 2009 Cairo speech or July 2010 Ground Zero statement. On the other hand, xenophobic measures that have often been applied in a discriminatory manner to groups that fall under the "Middle Eastern" heading have been renewed; for instance, the Obama Administration urged Congress to extend key PATRIOT Act provisions to surveil and search for terrorist activity, particularly of non-U.S. persons. While disease representations of unhygienic "Asians" have subsided to a degree with the demise of SARS and avian influenza, negative imaging of China in several domains (e.g., lead toxics) has regained ascendance in the current geopolitical context of U.S.-China rivalry. Attempts to address this racist-xenophobic orientation towards "Asians" have been non-existent by the Obama Administration (in public health and in general).

Equitable Care: Finally, the Obama Administration should address the undue burden placed on women in public health—highlighted by drastic biodefense measures like the Smallpox Vaccination Program. This includes compensating women fairly for their care work, reducing the unfair burden placed on women in care work by the taken-for-granted division of labor, and meeting the healthcare needs of women more generally. The key area of health reform launched by the Obama Administration thus far—health insurance coverage—reveals an inconsistent record in improving healthcare for women. While the Obama Administration's new health insurance plan will improve the health insurance coverage of large numbers of women (a vastly underinsured population), it has failed in a key area of women's healthcare—preserving women's access to abortion procedures. More importantly, since the inequalities women face in public health go far beyond what can be addressed in health insurance reform, much more remains to be done.

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