Health Care Workers In Peril:

Preparing To Protect Worker Health And Safety During Pandemic Influenza

A Union Survey Report

PARTICIPANT UNIONS:

American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)
American Federation of State, County and Municipal Employees (AFSCME)
American Federation of Teachers (AFT)
Communications Workers of America (CWA)
Service Employees International Union (SEIU)
United American Nurses (UAN)
United Food and Commercial Workers (UFCW)

produced by AFSCME Union Label
278-09

Executive Summary

An influenza pandemic is projected to have a global impact requiring a sustained, large-scale response from the healthcare community to provide care to sick patients. Healthcare workers will be at very high risk of becoming infected when caring for patients with pandemic flu unless adequate health and safety measures are in place, in advance of the pandemic, that will protect them. There is no existing comprehensive federal OSHA standard with mandatory and enforceable provisions that require planning and preparation designed to protect healthcare workers from exposures to pandemic influenza. Nevertheless, it is essential that workplaces plan and prepare for safety and health issues before the flu arrives.

In an effort to assess the extent of employer efforts in planning adequate safety and health measures for healthcare workers, a group of unions developed a "pandemic flu preparedness survey" to assess the level of preparedness on a facility basis. The survey was distributed to union leaders across the country who represent healthcare workers in unionized facilities. One hundred four (104) facility surveys were collected by six unions in fourteen states.

The results of the survey indicate that health care facilities have made some progress in preparing for an influenza pandemic but much more needs to be done. More than one-third of the respondents believe their workplace is either not ready or only slightly ready to address the health and safety needs necessary to protect healthcare workers during a pandemic. Given this lack of readiness, 43 percent of respondents believe that most or some of their fellow workers will stay home. One-third of the facilities have yet to develop a written plan for responding to pandemic flu and only 54 percent of the facilities have identified healthcare workers who will be at some risk of occupational exposure to the pandemic flu virus. Less than half the facilities surveyed (43 percent) have provided pandemic flu training to their workers, one of the fundamental elements of protecting workers from occupational hazards.

To address the problems of protecting healthcare workers identified in our pandemic influenza preparedness survey, we recommend that a number of actions be undertaken, including: (a) OSHA issue a mandatory workplace standard broadly addressing airborne transmissible diseases; (b) Congress identify a mechanism to assure that healthcare facilities not currently covered by the Occupational Safety and Health Act are required to comply with the provisions of the OSHA airborne transmissible disease standard; (c) Congress, through its oversight authority or other mechanisms, assess the extent of the readiness and deficiencies of healthcare facilities in addressing pandemic influenza, including protecting the health and safety of healthcare workers; (d) Congress or GAO evaluate the funding and readiness status of state and local pandemic influenza plans, including preparations for healthcare worker health and safety measures; (e) strengthen and modify the HHS/CDC infection control and worker protection measures in the current Pandemic Influenza Plan; and (f) state public health departments strengthen the worker health and safety elements of their state pandemic influenza plans.

Healthcare Workers In Peril:
Preparing To Protect Worker Health And Safety During Pandemic Influenza

Introduction

An influenza pandemic is projected to have a global impact on morbidity and mortality, requiring a sustained, large-scale response from the healthcare community. The U.S. Department of Health and Human Services estimates that 90 million people in the United States could become ill during an influenza pandemic, resulting in 209,000 to 1,903,000 deaths, 865,000 to 9,900,000 hospitalizations, and 45 million outpatient visits (1). In contrast, an average seasonal influenza causes approximately 36,000 deaths per year in the United States (2).

It is expected that such a flu pandemic will quickly overwhelm the healthcare system locally, regionally, and nationally that already have limited capacity to meet surges in demand. An increased number of sick individuals will seek healthcare services. In addition, the number of healthcare workers available to respond to these increased demands will be reduced by illness rates similar to pandemic influenza attack rates affecting the rest of the population. Finally, healthcare workers and healthcare resources will also be expected to continue to meet non-pandemic associated healthcare needs.

Healthcare workers will be at very high risk of becoming infected when caring for patients with pandemic flu unless adequate health and safety measures are in place, in advance of the pandemic, that will protect them. Unfortunately, there is no existing comprehensive federal Occupational Safety and Health Administration (OSHA) standard that is designed to protect healthcare workers from exposures to pandemic influenza or any other similar airborne transmissible disease. A petition submitted by several unions for a federal OSHA emergency temporary standard for pandemic influenza preparedness, which would have provided healthcare workers with the protections they need, was rejected by the Bush administration (3). On the other hand, the California Division of Occupational Safety and Health (Cal/OSHA) is currently undergoing rulemaking on a proposed comprehensive aerosol transmissible diseases standard applicable to healthcare facilities, services and operations that would include pandemic influenza. Cal/OSHA has not issued a final rule as this report was released. However, if Cal/OSHA does promulgate a final rule, it will represent the only mandatory workplace standard in the United States that provides comprehensive protection to healthcare workers exposed to the pandemic influenza virus. Unfortunately, this standard would be applicable only to healthcare facilities located in the state of California.

In the absence of mandatory and enforceable requirements in an OSHA standard to require planning and preparation to protect healthcare workers, the use of infection control measures by employers during a pandemic, such as the recommended guidance

issued by the Department of Health and Human Services (HHS) or OSHA, will essentially be voluntary in nature (1, 2). Under a voluntary system of protections, some employers are likely to choose less than adequate safety and health measures for their employees. The staffing situation will be worsened during a pandemic if healthcare workers do not show up for work because of concerns for their health and safety. Studies have reported that many healthcare workers may not go to work during a flu pandemic and that healthcare workers are more likely to work during emergencies if they have confidence in their employer's emergency preparedness (4, 5, 6).

In order to provide care for patients infected with pandemic flu and protect healthcare workers from exposure, it is essential that workplaces plan and prepare for safety and health issues before the flu arrives. Waiting to respond until the pandemic occurs will be too late. Employers need to prepare by putting infection control measures and emergency plans in place now. A plan for controlling exposure to pandemic flu must utilize engineering methods, personal protective equipment, identification and isolation of infected patients, identification of healthcare workers who will provide care for infected cases, worker training, and securing adequate supplies of safety equipment, antiviral drugs, and vaccine.

While healthcare employers should be implementing engineering and administrative controls to reduce exposure to the pandemic flu virus, a vital aspect of worker protection will be the use of personal protective equipment (PPE) – the respirators, gowns, gloves, face shields, eye protection, and other equipment – by healthcare workers in their patient care responsibilities. It is important to identify healthcare workers who will be required to wear respirators and to ensure that the employer has a respiratory program that complies with OSHA's respiratory protection standard, 29 CFR 1910.134.

Given the critical importance of being prepared to protect the health and safety of healthcare workers in advance of the pandemic, six trade unions that represent healthcare workers conducted a survey of facility preparedness. The survey was designed to assess the extent of current preparedness in protecting the health and safety of healthcare workers who are employed in various types of health care facilities around the United States.

Conducting The Survey

The consequences and risks associated with an influenza pandemic reach across political, geographic and demographic borders. U.S. hospitals and healthcare workers will be called upon to respond in ways that are unprecedented. Yet the healthcare system's preparedness for this public health crisis is uneven across states and within states. Resource allocation, stockpiling of supplies, healthcare worker education and training, infection control plans and engineering controls are but a few of the areas that are critical but inconsistently addressed.

In response to concerns about the health and safety of healthcare workers, the AFL-CIO convened a pandemic flu working group of healthcare union safety and health representatives to assess the preparedness of healthcare facilities to respond to a pandemic and to protect the health and safety of workers. This coalition quickly realized

that, although anecdotal information was easy to come by, there was little or no data documenting the experiences of the front line workers who will be responsible for treating infected patients. We also heard reports that the existence of infection control plans and emergency response plans did not guarantee that these plans were implemented or shared with workers.

In an effort to get a more accurate picture of what was happening on the ground for providing adequate safety and health measures, the working group developed a "pandemic flu preparedness survey" to assess the level of preparedness on a facility basis. The survey was distributed to selected union leaders across the country who represent healthcare workers in union facilities. For this survey, the term "healthcare worker" was broadly defined to include workers within a healthcare facility who are at risk of exposure to the pandemic flu virus resulting from the performance of their job duties. Union leaders completing the facility preparedness survey included local union officers (presidents, vice presidents, recording secretaries), shop stewards, safety and health committee members, and worker safety and health trainers. Every effort was made to ensure that the person completing the survey was knowledgeable about healthcare facility pandemic flu/health and safety plans and had access to workers.

One hundred four (104) surveys from six unions[1] in fourteen states[2] were completed and returned to the AFL-CIO. The majority of surveys were obtained from hospitals (63 percent), but all types of health care facilities were represented, including long term care, home health, corrections and outpatient clinics. Completed surveys covered a minimum of 192,391 healthcare employees.

Results

Overall Facility Readiness

Only 4 percent of the respondents reported that their facility was "very ready" to respond adequately to a flu pandemic, while an additional 33 percent felt their facility was "ready for most things." Alarmingly, more than a third (34 percent) reported their workplace was either "not ready at all" or only "ready for just a few things."

Plan and Policy Development

A comprehensive plan is the foundation for an adequate and appropriate response to pandemic flu. To assess the healthcare facilities' progress in developing and implementing a pandemic flu plan, we asked a series of questions on that topic. Two-thirds (66 percent) responded that their facility does have a written plan; of those, 81 percent responded that the union or their members have access to it. Nevertheless, one-third (34 percent) of the facilities had no pandemic flu plan whatsoever.

We found that while there may be a written plan to which workers have access, the union leadership and healthcare workers were largely left out of the planning process. Seventy (70) percent of respondents reported that they or their members were not involved in

[1] AFSCME, AFT, CWA, SEIU, UAN and UFCW
[2] CA, CT, FL, HI, IA, MD, MI, MN, NV, NJ, NY, PA, WA, WI

assisting in developing plans and procedures for how to address health and safety issues during a pandemic.
A substantial proportion of the surveyed healthcare facilities have yet to develop critical policies that should be in place during a flu pandemic, such as absenteeism of sick workers (43 percent), family leave to care for sick family members (43 percent) and medical removal protection (60 percent).

Identification of Cases and Worker-Specific Concerns

More than half of the facilities have procedures to identify and isolate patients who have symptoms associated with pandemic flu (64 percent) and to identify healthcare workers with influenza-like symptoms (60 percent). However, less than half of the facilities (44 percent) have identified the workers who will be taking care of patients with pandemic flu and only 54 percent have identified workers who are at risk of occupational exposure to pandemic flu. Likewise, only 52 percent of the facilities have identified high risk procedures and areas within the facility where persons may be exposed to infected patients.

Controls and Worker Protection

Identifying persons who are infectious is a critical first step to protecting patients and healthcare workers. Those who pose a risk to others can then be isolated and treated in areas with separate ventilation systems; healthcare workers can use personal protective equipment; and access to the infectious patients can be limited. Most respondents reported that their facilities have these protections in place. Almost three-quarters (71 percent) have airborne isolation rooms and 85 percent have a respiratory protection program. Yet, while 82 percent report that the facility will provide N95 respirators to workers providing care of pandemic flu patients, only 70 percent have actually identified those workers who will be required to wear respirators and only 63 percent have conducted medical evaluations of those who will use respiratory protection. Only 63 percent of facilities have stockpiled safety supplies (respirators and gloves) and less than one-third (31 percent) of the facilities have stocked antiviral drugs.

Worker Training and Communication

Regardless of how comprehensive a response plan may be and how many isolation areas a facility may have, if the healthcare workers have not had the appropriate training, the facility is not adequately prepared. Worker training is where “the rubber meets the road.” Responses to the survey indicate that this is an area where substantial shortfalls are occurring in the surveyed healthcare facilities. Less than half the facilities (43 percent) have provided training to workers on pandemic flu, communicated the pandemic flu plan to workers (48 percent), taught workers how to recognize symptoms of flu in themselves (45 percent) or conducted any drills to determine if the pandemic flu plan will work (31 percent).

Reporting for Work

While training and communication and other plan elements are significantly inadequate in most surveyed facilities, health care workers know enough to know that the risks of becoming infected with the pandemic flu virus at work are great. To minimize their own personal risk of exposure while caring for infected patients – and the risk they in turn may pose to their families – some workers will simply stay home. Forty-three (43)

percent of respondents to the survey said that, given the current level of preparedness for protecting workers at their facility, "most or some members will stay home." Only 33 percent of survey respondents believe most of their members will come to work during a pandemic.

Key Survey Results

Total Number of Facilities Surveyed:	104
State of Facilities Surveyed:	14 (Minnesota, Michigan, California, New York, Washington, New Jersey, Pennsylvania, Connecticut, Wisconsin, Maryland, Hawaii, Florida, Iowa, Nevada)
Minimum Number of Employees Covered by Survey:	192,391
Healthcare Facility Types Surveyed:	Hospitals, public health facilities, long-term care, outpatient clinics, nursing homes, correctional facilities, home health settings, hospice, mental health department, visiting nurse service.
Responses to Key Questions: Does your membership perceive the facility to be ready to respond adequately to a flu pandemic?	Very ready – 4% Ready for most things – 33% Ready for some things – 29% Ready for just a few things – 17% Not ready at all – 17%
Does the facility have a written plan for responding to pandemic flu?	Yes – 66% No – 34%
Was union leadership or members involved in developing plans for addressing health and safety issues during pandemic flu?	Yes – 30% No – 70%
Has the facility developed procedures to identify and isolate patients who have symptoms associated with pandemic flu?	Yes – 64% No – 34%
Has the facility identified workers who are at risk of exposure to pandemic flu?	Yes – 54% No – 46%
Has the facility provided training to workers on pandemic flu?	Yes – 43% No – 57%
Has the facility pandemic flu plan been communicated to workers?	Yes – 48% No – 52%
Has the facility conducted drills to determine if its pandemic flu plan will work?	Yes – 31% No – 69%
Given the current level of preparedness, will union members report for work during a pandemic?	Most will stay home – 6% Some will stay home – 37% Most will come to work – 33% Not sure – 24%

Discussion

The results of this survey indicate that healthcare facilities have made some progress in preparing for an influenza pandemic, but much more needs to be done if our nation's healthcare system is to respond successfully to a pandemic. Health care workers will be at the front lines if and when this crisis occurs. In order for them to protect others, they must be protected first.

When examining the results of our preparedness survey, a number of findings give us great cause for concern regarding the commitment of healthcare facilities to adequately provide for the health and safety of health care workers during a pandemic. More than one-third of the respondents believe their workplace is either not ready or only slightly ready to address the health and safety needs necessary to protect healthcare workers during a pandemic. Given this alarming lack of readiness, it is not surprising then that 43 percent of respondents believe that most or some of their fellow workers will stay home . If true, then the ability to respond to the patient care demands during a pandemic will be severely compromised. Problems of short staffing and lack of surge capacity in healthcare facilities already exist even in the absence of a pandemic. If healthcare workers stay home during a pandemic, as this survey and other reports suggest, staffing problems will become even more exacerbated.

One-third of the facilities have yet to develop a written plan for responding to pandemic flu. In the absence of such a plan, healthcare facilities will be hard pressed to provide the comprehensive response required to address the exposure risks that workers will encounter when providing care for infected patients. A pandemic flu plan represents the framework around which all workers safety and health measures must be integrated. Without a plan, worker health and safety – and patient care – is likely to suffer substantially.

One of the most disturbing findings for the health of workers and our communities is that workers could easily be exposed to pandemic flu but remain unaware that they have been placed in danger. Only 54 percent of the facilities have identified healthcare workers who will be at some risk of occupational exposure to the pandemic flu virus. In addition, only slightly more that half (52 percent) of the facilities have identified high risk procedures and areas that will place them at substantial risk of exposure. Identifying, in advance, workers who are expected to encounter exposure to the pandemic virus as a part of their job duties is an essential element in being ready to respond to protect them.

We are pleased that most of the facilities (85 percent) have a respiratory protection program that complies with the OSHA respiratory protection standard. Given the important role that respirators will play in protecting healthcare workers from exposure to the pandemic flu virus, a respiratory protection program is essential. However, we are concerned that nearly one-fifth (18 percent) of the facilities will not provide N95 respirators to workers providing care for patients infected with pandemic flu. An N95 respirator is the minimum level of respiratory protection recommended by OSHA and Centers for Disease Control and Protection (CDC) for protecting healthcare workers from inhalation hazards during an influenza pandemic. Surgical masks, on the other hand, are

not respirators and offer no protection to wearers from inhalation hazards. Nearly one-fifth of healthcare workers will not be provided with any respiratory protection – or be given completely ineffective surgical masks – when they care for infected patients.

The worker training and communication efforts by the surveyed facilities are unacceptably inadequate. Having a plan does not protect anyone unless it is fully implemented and communicated to all those who need to know. Less than half the facilities surveyed (43 percent) have provided pandemic flu training to their workers. Thus, a majority of facilities have failed to address worker training, one of the fundamental elements of protecting workers from occupational hazards. Further, only 31 percent of the respondents report that their facility has conducted any drills. Without conducting drills to evaluate the effectiveness of the plan – no matter how well written and communicated it may be – unanticipated problems will go undetected.

Our survey has identified serious deficiencies in the preparedness of our healthcare facilities to protect healthcare workers from exposure to pandemic influenza. Unless facilities do a better job of addressing all the health and safety areas we surveyed, healthcare workers will become sick and, as a consequence, be unavailable to provide care for sick patients. Moreover, healthcare workers who are infected due to a failure of healthcare employers planning and preparation will also put their communities at risk. In addition, healthcare workers may simply not show up to work if they believe they are not being adequately protected from exposure risks when providing care. In such a scenario, our ability to respond to the surge in the healthcare demands during a pandemic may collapse. A pandemic of influenza will require all our available health care resources to be "at the ready." Our survey findings indicate that we have considerable improvements yet to make in our healthcare system before we can truly call ourselves prepared for the pandemic. We must - and can -do better.

The problems experienced during the outbreaks of severe acute respiratory syndrome (SARS) in 2003 have underscored the importance of advanced planning and worker training on the use of personal protective equipment (PPE) to protect healthcare workers from infectious agents. The surge capacity that will be required to reduce mortality from a pandemic cannot be met if healthcare workers are themselves ill or are absent due to concerns about PPE efficacy. The increased emphasis on healthcare PPE and the related challenges anticipated during an influenza pandemic necessitate prompt attention in advance of a pandemic to ensure the safety and efficacy of PPE products and their use (7). "Just-in-time" training is an inadequate substitute for the more complete PPE training that should be delivered before an incident occurs. A recent report of very poor respirator donning by inexperienced volunteers during the recovery after Hurricane Katrina illustrates this point (8).

The results of a 2001 Bureau of Labor Statistics (BLS) respirator survey reflect our experience and concern with respirator issues in the healthcare sector as observed in this survey (9). In the Service sector (of which healthcare was a substantial portion), BLS found more than 50 percent of employers reported they did not assess employees' medical fitness to wear respirators while our survey reported 37 percent. Almost one-third of these employers in the BLS survey reported not conducting fit testing for employees wearing tight-fitting respirators, a similar finding to our survey (30 percent).

The BLS survey was conducted before and just after 9/11 and so it would have been expected that correct PPE use in healthcare would have improved, given the recommendations and funding provided by federal agencies for healthcare emergency preparedness. However, confounding this has been confusing respirator recommendations from HHS and the restriction of OSHA's enforcement of the annual fit testing requirement for tuberculosis respirator use (1,10).

In 2007, the National Academy of Sciences' Institute of Medicine (IOM) conducted a study on the personal protective equipment (PPE) needed by healthcare workers in the event of an influenza pandemic (7). The resulting IOM report, *Preparing for an Influenza Pandemic: Personal Protective Equipment for Healthcare Workers*, found:

> Despite expert recommendations and high-risk conditions, healthcare workers often do not wear PPE in situations that warrant its use… assessments of the explanations for noncompliance and the solutions to these issues need to focus beyond the individual and address the institutional issues that prevent, allow, or even favor noncompliance. Improving worker safety necessitates an organization-wide dedication to the creation, implementation, evaluation, and maintenance of effective and current safety practices – a culture of safety.
>
> Key components in promoting a culture of safety in healthcare facilities include providing leadership and commitment to worker safety; emphasizing education and training; improving feedback and enforcement of PPE policies and use; and clarifying work practices and policies.
>
> A concerted effort is needed to identify best practices in infection control and to disseminate this information to all sites where health care is provided. **These best practices could increase worker and patient safety and have positive ramifications well beyond preparedness for an influenza pandemic** (emphasis added).

The IOM report recommended that:

> … appropriate PPE use and healthcare worker safety should be a priority for healthcare organizations and healthcare workers, and in accreditation, regulatory policy, and training.

Unions representing healthcare workers believe that the healthcare sector has been slow to recognize and respond to the health and safety hazards facing their workforce. This slowness is likely to have negative consequences for healthcare workers during a pandemic unless increased comprehensive attention is given to their health and safety needs in advance of the pandemic's arrival. In our view, the reasons for this slow response include:

- *A false perception that the industry is self-regulated*. The Joint Commission, a health care accrediting body, conducts surveys of most hospitals every 3 years. Accreditation is directed primarily at assessing the quality of patient services.

Many Joint Commission inspectors lack training in occupational health and safety and direct little attention to workplace exposures and hazards during inspections. However, recent collaboration between OSHA and the Joint Commission around emergency preparedness and other issues is beginning to correct these shortcomings (11).

- *Belief that an industry that employs mainly females must be a safe industry.* Seventy-six (76) percent of hospital workers, 83 percent of nursing home workers and 93 percent of home care workers are female. According to 2007 BLS data, 91 percent of the almost 45,000 injuries and illnesses involving days away from work to nursing aides, orderlies, and attendants occur to women (12).

- *Focus on curative rather than preventive medicine*. Healthcare institutions are better prepared to respond to the dramatic aspects of curative medicine rather than to more mundane preventive medicine and public health, including occupational health and safety.

- *Focus on the patient, not the worker.* All too frequently healthcare workers may make false choices, erroneously believing that they must sacrifice their own safety for the welfare of a patient, not realizing that most worker hazards can be reduced or eliminated without compromising patient care.

- *Lack of safety and health contract language.* Because of low unionization rates, healthcare workers have not been as able to successfully negotiate improved workplace health and safety conditions as part of the collective bargaining process.

- *Historic lack of attention by governmental agencies responsible for health and safety*. OSHA's main focus continues to be the manufacturing and construction sectors. Only relatively recently has OSHA begun to issue standards and guidance for hazards that cause most injuries to healthcare workers. Many OSHA inspectors have not received adequate training on how to conduct inspections in the healthcare sector. Finally, in the past, Congress has earmarked funds for NIOSH to conduct sector-specific research programs for miners, construction and agricultural workers. But while NIOSH has been increasing incrementally research dollars for healthcare worker occupational health and safety, Congress has not yet allocated new funds specifically for this sector.

Conclusions and Recommendations

It is clear from our survey that respondent facilities are far from ready to provide health and safety measures that will be necessary to protect healthcare workers during a pandemic. Fully one-third of the facilities are not ready at all or only ready to provide a few protective measures. This is not a surprising finding, given that 34 percent of the facilities surveyed have yet to even develop a pandemic flu plan. In our view, the finding that a substantial proportion of the facilities surveyed lack a comprehensive plan speaks to the failure of the voluntary approach the federal government has taken regarding the planning for pandemic influenza.

Among facilities that do have written plans, 70 percent of respondents reported that neither the union nor its members were involved in developing those plans, thus leaving workers and their considerable health and safety expertise out of the planning process.

Having a written pandemic flu plan in itself, however, is not sufficient for assuring that workers will be adequately protected. Unless workers have an understanding of the elements of the plan and have received the necessary training that any plan must provide, the plan will have failed to assure that the facility is ready for the arrival of a pandemic. Our survey indicates that there are serious problems with implementation of pandemic flu plans even where they exist. Less than half of the facilities with plans have failed to communicate them to their healthcare workers nor have conducted any worker training on pandemic influenza. This substantial gap in implementing the pre-pandemic elements of the plans further supports workers' concerns that their facilities are not ready to respond to a pandemic.

In circumstances where healthcare workers believe their facility is not adequately prepared and ready to address their health and safety during a pandemic, considerable concern has been raised about whether or not workers will report for work under such circumstances (4,5,6). Our survey substantiates these published concerns, with 43 percent of our survey respondents indicating that, given the current level of preparedness in protecting workers, most or some of their members will stay home during a pandemic. Failures to report for work of this magnitude could have catastrophic consequences on our nation's ability to adequately provide the care necessary of patients infected with the pandemic flu virus.

To address the problems of protecting healthcare workers identified in our pandemic influenza preparedness survey, we recommend that the following actions be undertaken:

- The Occupational Safety and Health Administration propose and finalize a mandatory workplace standard broadly addressing airborne transmissible diseases, applicable to healthcare facilities, services or operations which follows the framework similar to that proposed by Cal/OSHA. While our survey focused specifically on pandemic influenza, it is important to comprehensively address the full range of airborne transmissible diseases with one standard so that all such diseases (e.g. pandemic influenza, tuberculosis, SARS, and others for which there are no existing standards) are covered within the scope of a single OSHA rule.

- Upon issuing a final rule, OSHA develop a comprehensive outreach, worker training and compliance strategy designed to assure implementation of the rule in all facilities covered by the standard. In the interim before a final rule is issued, OSHA should utilize its existing mechanisms already in place and take action to assist employers and workers in the healthcare industry in implementing its existing recommendations on pandemic influenza, including preparedness planning, exposure and infection control measures, personal protective equipment, and training. OSHA, in conjunction with NIOSH and CDC, should also engage in coordination with state health departments to reach out to assist healthcare facilities in developing and implementing pandemic influenza preparedness plans addressing worker protection issues.

- Congress identify a mechanism to assure that healthcare facilities not currently covered by the Occupational Safety and Health Act are required to comply with the provisions of the OSHA airborne transmissible disease standard.

- Congress, through its oversight authority or other mechanisms, assess the extent of the readiness and deficiencies of healthcare facilities in addressing pandemic influenza, including protecting the health and safety of healthcare workers.

- Congress or GAO evaluate the funding and readiness status of state and local pandemic influenza plans, including preparations for healthcare worker health and safety measures.

- Utilizing a mechanism that involves all stakeholders, including labor, and HHS/CDC, strengthen and modify the infection control and worker protection measures in the current Pandemic Influenza Plan, with NIOSH acting as the lead agency in this effort, with assistance from OSHA. Following OSHA promulgation of a final rule on pandemic influenza or airborne transmissible diseases, HHS/CDC modify the Pandemic Influenza Plan to reflect the new worker protection requirements.

- NIOSH receive funds to continue and expand its research efforts on healthcare worker protection issues connected with pandemic influenza, including personal protective equipment and engineering controls and the development of improved recommendations for worker protections in response to pandemic flu.

- State public health departments strengthen the worker health and safety elements of their state pandemic influenza plans, utilizing recommendations from NIOSH and OSHA to assure uniformity across all states.

- HHS assess the feasibility of the Department of Veterans Affairs (VA) pandemic influenza plan being adopted by other healthcare facilities (13). HHS also identify the most comprehensive and effective healthcare worker safety and health provisions in the State and VA pandemic influenza plans and develop modules and other materials for states to adopt and use to improve the healthcare worker safety and health protections in their pandemic flu plans.

References

1. HHS Pandemic Influenza Plan. U.S. Department of Health and Human Services. November 2005.

2. Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers, Occupational Safety and Health Administration, U.S. Department of Labor, OSHA 3328-05, 2007.

3. Union petition to United States Department of Labor for an OSHA Emergency Temporary Standard for pandemic influenza preparedness, submitted December 21, 2005. Petition accessible at http://www.afscme.org/docs/pr060103.pdf

4. Balicer RD, Omer SB, Barnett DJ, Everly GS. Local public health workers' perceptions toward responding to an influenza pandemic. BMC Publ Health 6:99, 2006.

5. Irvin CB, Cindrich L, Patterson W, Southall. Survey of hospital healthcare personnel response during a potential avian influenza pandemic: will they come to work? Prehospital Disast Med 23(4):328, 2008.

6. Qureshi KA, Gershon RRM, Staub T, Sherman MF, Gebbie E, McCollum M, Erwin MJ, Morse SS. Healthcare workers' ability and willingness to report to duty during catastrophic disasters. *Journal of Urban Health*, 82(3):378, 2005.

7. Institute of Medicine. 2007. "Preparing for an Influenza Pandemic: Personal Protective Equipment for Healthcare Workers". Washington, DC: The National Academies Press.

8. Kristin J. Cummings, Jean Cox-Ganser, Margaret A. Riggs, Nicole Edwards, and Kathleen Kreiss. Respirator Donning in Post-Hurricane New Orleans, Emerg Infect Dis. 2006 Nov. Vol. 13, No. 5, May 2007

9. Bureau of Labor Statistics, U.S. Department of Labor. Respirator Use and Practice. 2002.

10. Association for Professionals in Infection Control and Epidemiology, Inc., http://www.apic.org/Content/NavigationMenu/Advocacy/Regulatory/Regulatory.htm , accessed January 23, 2008.

11. Department of Labor Occupational Safety & Health Administration, Alliance Annual Report - Occupational Safety and Health Administration (OSHA) and The Joint Commission and Joint Commission Resources (JCR) , August 29, 2007

12. Bureau of Labor Statistics, U.S. Department of Labor. Case and Demographic Characteristics for Work-Related Injuries and Illnesses Involving Days Away From Work, 2007. **http://www.bls.gov/iif/oshwc/osh/case/ostb1985.pdf,** accessed February 26, 2009.

13. VA Pandemic Influenza Plan. Plan accessed at: http://www.publichealth.va.gov/flu/pandemicflu_plan.htm, accessed February 5, 2009.