

American Federation of Labor and Congress of Industrial Organizations



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Influenza Coordination Unit
Centers for Disease Control and Prevention
U.S. Department of Health and Human Services
Attn: Prevention Strategies for Seasonal Influenza in Healthcare Settings
1600 Clifton Road, NE MS A-20
Atlanta, GA 30333

RE: Updated Guidance: Prevention Strategies for Seasonal Influenza in Healthcare Settings

Dear Sir or Madam:

During the H1N1 pandemic, which currently remains in effect as determined by the World Health Organization, guidance from the Centers for Disease Control and Prevention (CDC) was vitally important to ensure that healthcare workers were adequately protected when providing care to infected patients. The *Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel* (issued October 14, 2009) includes a comprehensive set of safety and health measures designed to protect healthcare workers.

The CDC guidance outlines a hierarchy of controls to prevent the transmission of the H1N1 virus, including as the last step in the hierarchy the use of personal protective equipment such as respirators to protect wearers from inhaling small particle aerosols. Under the guidance, respiratory protection at least as protective as a fit-tested N-95 filtering facepiece is to be worn by healthcare personnel who were in close contact with patients with suspected or confirmed H1N1 influenza and while aerosol-generating procedures were being performed.

The AFL-CIO supported the October 14, 2009 CDC guidance, including the recommendations involving respiratory protection, as an appropriate and necessary set of control measures to protect healthcare workers from all three

routes of transmission of influenza including small particle aerosols. However, CDC now proposes to replace the H1N1 guidance with a new document that treats H1N1 influenza as though it were no different than seasonal influenza where droplet protections (surgical masks) rather than respiratory protection is being recommended for healthcare workers who are in close contact with patients with suspected or confirmed influenza. Under the proposed guidance, respiratory protection is recommended for healthcare personnel only during aerosol-generating procedures.

In our view, the proposed guidance substantially weakens respiratory protection for healthcare workers who are in close contact with patients confirmed or suspected H1N1 influenza. The AFL-CIO is opposed to this weakened respiratory protection and urges CDC to retain the respiratory recommendations found in the current interim guidance for H1N1. Respirators, and not surgical masks, must be worn by healthcare workers when there is the potential for exposure to airborne transmission of the H1N1 virus. Surgical masks do not protect wearers against inhalation hazards posed by exposures to the H1N1 virus.

In treating H1N1 as though it were seasonal influenza and permitting the use of surgical masks rather than respirators by healthcare workers, CDC justifies its recommendation change based on two general claims. The first such claim is that an effective vaccine for the 2009 H1N1 virus is widely available. The second claim is that the overall risk of hospitalizations and death among people infected with this strain of virus is now known to be substantially lower than pre-pandemic assumptions. In our view, the claim about the effectiveness of the vaccine is grossly overstated while the second claim is irrelevant and misleading. As a result, the AFL-CIO believes CDC lacks solid scientific rationale to abandon its current recommendation that healthcare workers wear N95 respirators instead of facemasks when entering the room of an infected patient. The critique of CDC's claims and support for our position follows below.

The 2009 H1N1 Vaccine Is Far From 100% Effective And The Vaccine Alone Will Not Insure Protection For Healthcare Workers Exposed To The Virus

The CDC argues that the 2009 H1N1 vaccine is "effective", implying somehow that the vaccine is 100 percent (%) effective or nearly so and as a result, concludes that there is no need to recommend respiratory protection for healthcare workers who are in close contact with patients with confirmed or suspected H1N1 influenza. What CDC fails to acknowledge, however, is that the effectiveness of influenza vaccines vary from year to year and they are never 100% effective among those who are vaccinated. For example, the efficacy of the vaccine for the 2007-2008 influenza season was 68% for the inactivated

vaccine and 36% for the live attenuated vaccine, far less than providing complete protection for the populations receiving them (1).

Substantially less than full protection is the case as well for the 2009 H1N1 vaccine. At the June 23-24, 2010 meeting of the Advisory Committee on Immunization Practices (ACIP), a case-control study conducted in the United States demonstrated that the 2009 H1N1 vaccine had an efficacy of only 62% (2). That leaves nearly forty percent of the vaccine recipients without any immunological protection against the virus. The absence of a vaccine with 100% effectiveness is particularly a problem for those unprotected workers who are exposed via the airborne transmission route in circumstances where respirators are not worn as the new guidance is recommending. The problem is further compounded when you couple this overall ineffectiveness of the vaccine with a low vaccination coverage among healthcare workers with the 2009 H1N1 vaccine (37.1%), it clearly demonstrates that an H1N1 vaccination program alone will fail to protect a substantial number of healthcare workers (3).

Guidance recommending an ineffective vaccine with low vaccination coverage that also eliminates respiratory protections against inhalation of small aerosol particles is not sound occupational health policy. The vaccine should be viewed as one element of a comprehensive approach to protecting healthcare workers against H1N1 – not an exclusive remedy for protecting workers. A comprehensive approach to healthcare worker protection against H1N1 would include vaccination and respiratory protection and we urge CDC to retain the recommendation for N95 respirators whenever healthcare workers experience close contact with infected (confirmed or suspected) patients.

A Lower Risk For Hospitalization and Deaths Among Those Infected With H1N1 Compared To Pre-Pandemic Assumptions Is Not Sufficient Rationale To Abandon Respiratory Protections For Healthcare Workers

The federal government's pre-pandemic assumptions focused on an overall risk scenario with an extremely virulent virus causing millions of deaths and hospitalizations. Fortunately for all of us, those dire assumptions did not materialize. However, the 2009 H1N1 virus was not without risk at all and, in fact, was responsible for causing deaths and hospitalizations with an age distribution pattern that was distinctly different from that of traditional seasonal flu. The differing age distribution pattern we experienced with H1N1 compared with seasonal flu has great importance in the workplace that CDC has virtually ignored in proposing its revised guidance. And merely because the risk we actually experienced with H1N1 was lower than the most severe assumptions pre-dating an actual event is irrelevant when it comes to our government's responsibility to recommend and maintain necessary protections for healthcare workers who are at risk.

In a typical seasonal flu, those most at risk of developing serious adverse health effects from flu infection include persons over 65 years of age and children under 4. However, in the H1N1 pandemic working age people 18 to 64 years of age were responsible for the greatest proportion of those who experienced a hospitalization or death. According to CDC estimates from April 2009 to April 10, 2010, approximately 160,000 of the 274,000 total hospitalizations occurred in the 18 to 64 years old age group (58%) while 9,570 of the 12,470 total deaths (77%) were 18 to 64 years of age (4). Thus, the severe outcomes of the 2009 H1N1 influenza affected younger ages than normally occurs during seasonal influenza, including individuals without underlying risks such as obesity or asthma (5, 6, 7).

In proposing to reduce protections for healthcare workers because the “overall” risk of hospitalization and death is lower than assumptions preceding the H1N1 pandemic, the CDC completely ignores the evidence that the severest outcomes fall within the age range of the working population. That age range includes the healthcare workers the guidance is intended to protect. When the severity is measured instead by the metric “years of life lost” rather than deaths, the 2009 H1N1 pandemic was not as “mild” as some would argue. Using this metric which accounts for a lower mean age of death of the 2009 H1N1 pandemic compared to a typical seasonal flu, the impact of years of life lost was at least as severe as an average seasonal flu and may be as great as that of the 1968 influenza pandemic (8). CDC needs to account for the disproportionate impact that H1N1 infection has on the working age population in its guidance and, as a consequence, retain the full respiratory protective measures that are present in the current guidance.

CDC Acknowledges That All Three Routes of Transmission of the Influenza Virus May Occur But It Fails to Recommend That Healthcare Workers Be Protected From Airborne Transmission

The CDC contends that influenza viruses are thought to spread from person to person primarily via large droplet transmission but also indicates that there is evidence that contact and airborne transmission may occur. CDC further admits, however, that the relative contribution of the three influenza transmission routes is “unclear”. Nevertheless, CDC proposes in this revised guidance to protect healthcare workers from only two transmission routes, large droplet and contact, and to ignore altogether and fail to recommend respiratory protection that is required to provide protection against airborne transmission of small particle aerosols.

There is no evidence cited by CDC to support the claim that influenza is transmitted primarily via large droplet transmission. CDC also admits that there is little scientific evidence that indicates the relative contribution of any of the three routes of influenza, including droplet transmission that it supposes accounts for some yet undetermined primary route. While it is true, at the present time, that

we don't firmly know the relative contributions of the three transmission routes of influenza, that is not a justification for CDC to ignore airborne transmission as a route that healthcare workers must be protected against in its guidance. Rather, there is a substantial and growing body of evidence that airborne transmission is an important transmission route for the influenza virus (9, 10, 11, 12, 13). And the evidence indicates that exposure to small particle aerosols is not confined solely to aerosol generating procedures as human exhaled breath contains small particulates as well (14).

Given that it is established that airborne transmission of influenza occurs, healthcare workers have an expectation that they will be protected from an inhalation hazard involving small particle aerosols. CDC then has an obligation to insure that its guidance includes recommended protections against all three transmission routes. The proposed guidance fails to recommend airborne transmission protections in the form of respiratory protection except in cases where aerosol-generating procedures are conducted. Healthcare workers are entitled to be protected against all routes of H1N1 influenza transmission and we urge CDC to issue a final guideline that achieves this objective.

Respirators, Not Surgical Masks, Are Required to Protect Healthcare Workers From Airborne Transmission.

In the current 2009 H1N1 guidance for healthcare workers, CDC recommends the use of respiratory protection that is at least as effective as a fit-tested disposable N95 respirator whenever they come into contact with patients with suspected or confirmed 2009 H1N1 influenza. The AFL-CIO supports this recommendation. This recommendation should be retained in the revised recommendation as the nature of the exposure to the H1N1 virus, small particle aerosols, will be the same in the upcoming season as it was during the previous year. Nothing about the exposure characteristics with the H1N1 virus will be different in the new season compared to that we've experienced over the past year.

Instead of recommending respirators to protect healthcare workers from airborne transmission of H1N1 however, the CDC proposes guidance that substitutes surgical masks for respirators when healthcare workers come into close contact with infected patients. This recommendation will fail to protect healthcare workers from the hazards of inhaling small particle aerosols because surgical masks are not designed to protect the wearer from inhaling airborne respirable particulates. And it violates the requirement of OSHA's respiratory protection standard, 29 CFR 1910.134, that requires employers to provide NIOSH-certified respirators, like N95's, in these circumstances.

It is well established that surgical masks, unlike respirators, are not designed to provide the wearer with protection against inhaling airborne respirable

particulates. Surgical masks do not possess adequate filtering efficiency characteristics nor do they provide a tight fit on the face of the wearer to minimize leakage (15, 16). N95 respirators, on the other hand, are certified by NIOSH with minimum filtering efficiencies and they are designed to fit tightly on the face of a wearer as required by the fit testing protocols of OSHA's respiratory protection standard. In short, CDC is proposing to recommend a device, surgical masks, that cannot and will not provide protection for healthcare workers from airborne transmission of the H1N1 virus. The CDC needs to continue following the advice of the September 1, 2009 Institute of Medicine (IOM) letter report, *Respiratory Protection for Healthcare Workers in the Workplace Against Novel H1N1 Influenza A*, which concluded that the filtration and fit of medical masks is "unlikely to be effective against airborne transmission" and recommended that healthcare workers use N95 respirators (17). We agree with the IOM's recommendation and so should CDC in revising this guidance.

CDC Cites No Evidence To Support its Changes on Respiratory Protections And Ignores Evidence That Healthcare Workers Were At Risk of Becoming Infected With H1N1 From Workplace Exposures

In crafting this proposed revision to its guidance for H1N1, CDC cited no scientific evidence to support its changes from the current guideline for 2009 H1N1 influenza. It cites no evidence to support a change from recommending respirators to surgical masks when healthcare workers have close contact with infected patients. It provides no documentation that surgical masks have adequate fit and filtering capabilities that would support the change CDC proposes. It offers no scientific studies that call into question whether airborne transmission of influenza occurs or that its relative contribution is negligible in the transmission of the virus. And CDC ignores evidence that healthcare workers were at risk of becoming infected with the 2009 H1N1 strain of influenza.

One might expect that healthcare workers who provide care and come into close contact with infected patients would themselves be at risk of being exposed at work and becoming infected as a result of that work exposure. It is clear that a major failing of our public health surveillance system during the 2009 H1N1 pandemic was not systematically following and assessing the infection experience among healthcare workers and determining any work-relatedness among those who became infected. However, what little we do know about this issue confirms that healthcare workers were at risk in the workplace of developing work-related transmission of the 2009 H1N1 virus and that certain healthcare occupations were at elevated risk of becoming infected (18, 19). Nowhere does CDC cite or acknowledge this evidence and concern that healthcare workers are at risk of becoming infected following exposures in the workplace. An acknowledgement of this work-related connection should leave CDC with no choice other than to recommend that healthcare workers be provided with respiratory protection.

Conclusion and Recommendation

In drafting this proposed revision to its current guideline on 2009 H1N1, CDC has taken a step backwards in its recommendations for protecting healthcare workers. On the basis of an overstated claim that we have an effective vaccine and an irrelevant and irresponsible contention that because the risks of severe outcomes among those infected were less than a scenario of worst-case assumptions, CDC decides it can retreat from the respiratory protection that healthcare workers need to protect them from airborne transmission of the H1N1 virus. The AFL-CIO urges CDC, based on the evidence and arguments we've put forward, to issue a revised guidance that retains the recommendation that healthcare workers be provided respiratory protection whenever they come into close contact with patients with suspected or confirmed H1N1 influenza. Our nation's healthcare workforce deserves nothing less from CDC when it comes to protection of those who provide care to patients who are made sick from a pandemic flu virus.

Sincerely,



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