

**Cal/OSHA Advisory Meeting on Airborne Infectious Diseases
July 26, 2004, 1515 Clay St. Oakland CA**

Chairs: Bob Nakamura, Deborah Gold

Participants

Len Welsh, Acting Chief, Division of Occupational Safety and Health (DOSH)
Steve C. Smith, Supervising Industrial Hygienist, DOSH
Frank Myers, California Association for Professionals in Infection Control
Sandy Prickett, Marin General Hospital
Laura Vo, City of Sacramento
Pamela Persaud, St. Joseph Health System
Chuck Lohrstorfer, AOHP
Kevin Thompson, Cal-OSHA Reporter
Enid Eck, Kaiser Permanente
Jennifer Natsch, ValleyCare Health Systems
Janet Macher, California Department of Health Services (CDHS), DEODC, EHLB
Shelly Morris, Sutter Medical Center
MaryAnne O'Leary, SF Dept. of Public Health, Occ. Safety and Health
Martha Davis, CDHS, DEODC
Caryn Thornburg, ValleyCare Health Systems
Pupua Grover, Service Employees International Union (SEIU) Local 250, Shirley Ware Education Center
Sarah Royce, CDHS, Tuberculosis Branch
Sue Eisberg, Sutter Health
Herbert Dunmeyer, Becton Dickinson
Mark Nicas, U.C. Berkeley, School of Public Health
Mary Mendelsohn, CACC
Lilly Kaneshige, Kaiser Permanente
Penny Villalva, California Department of Corrections
Chris Cahill, CDHS, L&C Program
Roger Richter, California Hospital Association
John Mehring, SEIU
Neil Kellman, OSHPD
Tom Mitchell, California Occupational Safety and Health Standards Board
June Fisher, TDICT Project
Cindy Fine, San Ramon Regional Medical Center
Janice Prudhomme, CDHS, Occupational Health Branch
Jennifer McNary, CDHS, PSB
Mitchell Cohen, Kaiser Permanente
Kevin White, California Professional Firefighters
Kay McVay, California Nurses Association
Janet Abernathy, Queen of the Valley Hospital
David Caraveo, American Medical Response
Tom Eller, American Medical Response
Susan Nye, American Federation of Nurses, SEIU Local 535

Summary of Major Topics

Scope

There was a discussion about which respiratory diseases should be included in this standard. Participants supported applying certain control measures to all respiratory diseases prior to diagnosis or classification. Depending on the institution, this would include source control measures, such as cough etiquette, hand hygiene, and isolation where appropriate. Participants supported addressing diseases requiring droplet or airborne precautions, although specific control

measures may differ. Future discussions should include participants from all environments to be addressed by the standard, such as health care, corrections/law enforcement, and homeless shelters, and laboratory exposures.

Written Airborne Infectious Disease Exposure Control Plan

Participants agreed that the standard should require a written exposure control plan, similar to Bloodborne Pathogens. The plan should include exposure assessment, control measures, training and employee involvement, and medical surveillance. Many institutions have tuberculosis control plans.

Engineering and Work Practice Controls

Participants supported recognizing that engineering and work practice controls must be compatible with different institutions and work environments. Low technology control measures should be incorporated, particularly in non-hospital environments, such as emergency medical services, clinics and homeless shelters. Some participants supported specific recommendations for specific procedures. There was discussion about current building code (OSHPD) requirements and about surge capacity and mass events.

Respiratory Protection

There was discussion of difficulties institutions are having in coming into compliance with Section 5144 regarding the use of respirators to protect against tuberculosis. Questions were raised regarding the necessity of annual fit-testing, and regarding providing initial medical evaluations using the questionnaire in Appendix C. There was also discussion regarding whether this standard should include risk-based specific requirements for respirator use.

Medical Surveillance

Participants agreed that as part of the proposed standard, employers should offer influenza vaccine and other CDC recommended vaccines for respiratory illnesses. Where the CDC recommends pre-vaccination screening, this should be provided.

Detailed minutes

At 9:40 the meeting was called to order, and Len Welsh gave a brief history of the project. L. Welsh said that the original TB standard advisory committee met about ten years ago because there had been a sudden increase in the number of TB cases in the US population starting from the late 1980's. A draft regulation was developed, but the perception of the problem by the time the rulemaking started was that TB was decreasing and the problem was essentially over. Elements of the draft, however, were incorporated by the Division into its Policy and Procedures manual, and these procedures are still applied. The instructions in the P&P are linked to applicable regulations, such as the requirement for engineering controls, section 5141, and the requirements are based on the CDC TB guidelines. This forms the basic approach for DOSH compliance inspections.

During the Cal/OSHA standards development process, Federal OSHA also announced intended rulemaking and published a draft standard, further reducing the need for the Board to adopt TB rulemaking. Federal OSHA more recently adopted a respirator standard (1998) that was more stringent than the previous standard, but kept the language of the earlier version as the regulation that would apply to the use of respiratory protection for TB exposures. The main features that were exempted were annual fit testing and specific medical evaluations for users. Then in 2003, Federal OSHA abruptly dropped the TB rulemaking altogether, and followed by repealing the special TB respirator standard. Cal/OSHA had to make the same change with rulemaking to drop section 5147. During this

process there were many comments that the general respirator standard should not be applied to TB, but the Board adopted the change in order to be as effective as federal OSHA. SEIU, APIC, and the AHA had agreed to meet to discuss and reach consensus on a reasonable time frame for implementing the new requirements. Currently there is a three month window from the effective date that will be set by the office of administrative law (OAL). If consensus is reached, it may be possible to change the effective date of some requirements.

The other issue that was presented at the Board hearing was to look at developing a comprehensive standard for airborne infectious diseases. The recent outbreak of SARS, and the homeland security concerns make this a very timely concept, and this group can take the lead, in the nation, with dealing with this issue.

L. Welsh then reviewed the rulemaking process, and explained that each proposed standard is subject to a public comment period, the first one for 45 days, and each revised proposal for 15 until the Board feels that the problems have been addressed. The OAL can also require subsequent revisions.

L. Welsh noted that he could not stay for the whole meeting and turned the meeting over to Deborah Gold, who asked each attendee to state their name and affiliation.

Scope

D. Gold started with a brief explanation of the terms, the use of SIP (significant infectious pathogen). She explained that the term as proposed included both pathogens for which the CDC recommends airborne isolation, and pathogens for which the CDC recommends droplet precautions. She asked the group if they believed that pathogens requiring droplet precautions should be included in the standard.

D. Gold explained that the 1996 infection control guidelines for hospitals adopted two tiers of precautions, standard precautions, that applied to all patients, and transmission based precautions. There is now a revised draft, which includes standard and expanded precautions. The recommendations for specific pathogens are summarized in the Appendix A handout. This document also includes a section on cough etiquette. In both of these documents, there is a distinction between the larger droplets and smaller particulate. Negative pressure isolation rooms and other forms of engineering controls are required to isolate airborne infectious agents. In this state, the Office of Statewide Health Planning and Development (OSHPD) has adopted some of the requirements for negative pressure rooms into the building code.

The guidelines distinguish between droplet and airborne precautions based on the droplet size, and a recognition that heavier particles drop out sooner. There is a rule of thumb that droplets settle within 3 feet, but that is not the full picture. The size of infectious particles is not the only determinant of how long they remain airborne. Influenza is an example of a disease for which droplet precautions are recommended. SARS was first classified as a droplet hazard, but reclassified as requiring airborne precautions. There are different settings to consider, and the separate issues of emergency response.

D. Gold asked if people were getting grants (or trying) from Homeland Security. Some were. She explained that OSHA is developing the "first receiver" concept. Basically, for first receivers, the only contamination is the contamination that comes with the patient. As compared to first responders, who go to the scene of a release, first receivers are providing treatment away from the release site, although it may be close by. This concept doesn't apply when the hospital is part of the contaminated zone. She summarized that there are therefore different categories of environments that have to be considered, and a variety of possible diseases to plan for. So the first issue is to decide which diseases to include in the scope.

Mary Mendelsohn said that the standard should be as comprehensive as possible, including diseases that come under both droplet and airborne precautions, because at the initial encounter with a patient, providers would not have the information to categorize the disease, and determine whether it is within the scope. She wants the standard to prepare for both general treatment and disasters. Frank Myers said the standard needs to clarify what diseases are covered, for example, do you want to exclude meningococcal diseases? Should some droplets be excluded or there should be a 2 response approach? L. Welsh suggested that there be a two-stage response, a first response, and then a more specific second response once you know what you have.

Kevin White said that for firefighters and paramedics, there is always a response before identification of the disease, so there is a need for protective equipment. He suggested that there might be a list of symptoms, and a hierarchy of actions. Chris Cahill said that the standard should include parts of the respiratory etiquette document. This approach should be taken up-front. You can't diagnose micoplasma pneumonia based solely on initial symptoms. If the patient is coughing, and you're not protected, you're exposed. David Caraveo said that when ambulance drivers go into a house to transport a patient, you don't know what diseases may be present, and engineering controls aren't an option. Martha Davis suggested an "all hazards approach," particularly if there is a suspicion of chemical or biological agents. Health care providers need to prepare for the worst case.

C. Cahill said that there are two distinct areas – for airborne and droplet exposure; it is confusing to have them in the same paragraph. June Fisher suggested that there needs to be a concept of universality of precautions in the standard, similar to that used in bloodborne pathogens. L. Welsh said that he didn't want to invent new terminology, and wanted to use CDC terms. C. Cahill noted that there is a new draft document due out from CDC/HICPAC on tuberculosis control. Enid Eck said that when you know the disease, you can distinguish between airborne and droplet precautions, but you need to include exposures that occur when you don't know what the patient has. There should be a symptom based approach, something automatic to do with the patient on the initial encounter. It doesn't matter whether the cough is airborne or droplet – their cough should be covered with a surgical mask or Kleenex, and where possible there should be some guidance regarding where they are placed and disinfection procedures. Everyone is concerned about the possible emergence of an avian or a pandemic flu. The standard should address diseases requiring both airborne and droplet precautions and first response. The standard should address controls for different settings and work activities. Once they know what the patient has, then it should follow clinical guidelines.

Shelly Morris said that with SARS there is an issue of contamination of personal protective equipment and transmission of disease; there should be another step for droplet PPE decontamination. F. Myers suggested leaving terms open, so that new diseases can be automatically covered based on CDC definitions. M. Mendelsohn suggested using the term significance respiratory pathogen or significant respiratory disease, since the standard is not addressing other modes of transmission. E. Eck suggested looking at the bloodborne pathogens standard as a model for PPE, and that we require disposal of all PPE as contaminated. The standard should also promote the availability and use of alcohol gel.

C. Cahill said that the standard should address the quantiferon test. Title 22 is not going to be changed because it is too cumbersome a process.

Janet Abernathy said that tuberculosis is different from other infections. Susan Nye said that even though a patient may be present in the hospital for something else, if there is a cause for concern, they should be checked for tuberculosis. There should be a protocol for everyone, particularly in the emergency room, that looks for something other than a cough. Chuck Lohrstorfen said that PPD conversions are not occurring from people who have already been identified as infected with tuberculosis, and it isn't occurring if employees have been fit-tested. You can't rely on PPD testing for first responders or emergency department personnel.

Pamela Persaud said that there should be standard, universal things to do. If you know what the patient has, you can take specific precautions. There should be guidelines for effective procedures prior to identification of the disease. There was a study at Harbor UCLA where they utilized the RIPT (respiratory isolation of pulmonary tuberculosis) protocols developed by the Curry center. If the score is greater than 5, implement precautions. The protocol combines risk factors and symptoms.

F. Myers said that there should be a screen implemented for rating respiratory symptoms whatever the patient's presenting complaint is. A patient who presents with other symptoms is the number 1 source of TB conversions. M. Davis said that the standard should also address the covert release of infectious disease agents. J. Fisher said that the standard should encourage the development of new procedures and technology to protect against airborne transmissions, for example some forms of local protection. E. Eck said that this standard needs to address person to person disease transmission.

D. Gold said that there appeared to be a consensus for establishing an initial set of precautions for first contact with patients, prior to a diagnosis, and that there be a staged response as the case becomes more defined. People at the

meeting indicated agreement with this concept. D. Gold asked that people send specific comments on the definitions section. She asked for any other comments on the scope.

E. Eck said that the standard should address vaccine preventable airborne transmission. The employer should not only offer the vaccine, but the employee should have to formally decline vaccines, such as influenza vaccine. This would encourage more employees to get vaccinated.

J. Mehring suggested that the standard should also address contact precautions, and diseases for which the CDC's only expanded precaution recommendation is contact precautions, at least at the initial encounter until the need can be ruled out. E. Eck said that there is too much controversy in the recommendations for diseases only requiring contact precautions, and it would complicate the process. C. Cahill agreed, but said the standard should address the appropriate use of gowns, gloves, masks and other basic contact precautions.

Jennifer McNary asked if the standard was limited to human to human transmission, for example, does it apply in a laboratory setting? What about the handling of anthrax in a lab? Should it be agent based, or activity based, for example should it include the likelihood of aerosolization? How do you address the end risk?

D. Caraveo suggested that the standard should address scabies and other contact transmission diseases. M. Davis suggested that employers should follow CDC guidelines, and also guidelines for first receivers. F. Myers said that we need to protect against diseases that are spread solely by contact, but in this process we should move forward on respiratory diseases. Otherwise, the standard could become too muddled, for example in dealing with issues like MRSA. It should cover laboratory workers and aerosolization processes. K. White said that there is overlap – respiratory diseases can not be isolated from diseases spread by contact.

In regards to coverage of this standard, C. Cahill said that the Division should contact the Long Term Care Association (LTCA). This industry tends to exclude themselves from OSHA. Susan Nye suggested contacting clinics and medical offices. J. Abernathy asked how homeless shelters would be involved. J. Fisher asked about the application to home health. Herb Dunmeyer said that there is a shortage of 18,000 nurses, and that nurse registries are being used to fill that gap, so there should be outreach to the registries. C. Cahill suggested contacting traveling nurses. Sue Eisberg said that health care is often a multi-employer setting, and that we should clarify how the standard affects other people in the hospital. J. Abernathy asked how it would apply to independent contractors. J. Fisher suggested asking the California Medical Association to participate.

Infection Control Plan

D. Gold then asked what people thought about the Exposure Control Plan section. F. Myers said that he was comfortable with it, most hospitals have a TB Infection Control Plan. E. Eck said that the exposure control plan is the logical way to go. Facilities that are designated to deal with "terrorism" events may want to include the plan as part of preparedness. She suggested flexibility in how it is required. J. Mehring said that the exposure control plan in bloodborne pathogens is very helpful to employees – they want a specific document that they can go to. J. Fisher said that the plan should include who is responsible for implementing the plan.

C. Fine said that the exposure control plan is a good idea, although in her experience no one asks for it. She was in Toronto during the SARS outbreak. Control relied upon 1. separation of patients and 2. protection for high risk procedures. For example, they needed permission for CPAP from infection control. They also avoided emergency intubation.

J. Fisher said that the problem is that people aren't trained in the program. The standard should define what consultation with workers consists of, and develop effective training requirements. Fifty percent of hospitals haven't really complied with these provisions in the bloodborne pathogens standard.

The meeting broke for lunch at 11:45, and reconvened at 1:00 p.m.

Engineering and Work Practice Controls

Bob Nakamura introduced the discussion of engineering and work practice controls.

J. Fisher said that Cal/OSHA should identify areas where engineering controls are needed, such as local protection for suctioning or other high risk procedures. Although that equipment does not exist at this time, it may be feasible. It may also be feasible to develop masks that are self-adapting to the user. Her experience is that controls can be developed if resources are put into it. They were told that safer needle devices aren't possible, but now many devices are available. We need a task force to identify problem areas and to pressure NIOSH. We shouldn't just stick to existing technologies.

S. Nye said that item (d)(3) in the proposed standard (that requires isolation of individuals with confirmed or suspected infectious TB) was not realistic for all environments, including clinics and homeless shelters. M. Davis asked if (d)(8), that addresses institutions that will receive mass casualties related to terrorism. Mark Nicas asked what the work practices section was meant to encompass. He said that in (d)(2) the word inhalation should be added. In regards to (d)(3), there should be surge protection – in the event of too many patients, perhaps they can be placed on units with high ventilation rates and increased air filtration. What documentation is there regarding organism kill rates? There should be performance guidance for high risk procedures.

J. McNary said that the section could be more specific, for example by requiring booths for aerosolized pentamidine or sputum induction. J. Fisher said there should be a hierarchy of controls. F. Myers said that the standard should identify a hierarchy of sites, for example, what is reasonable for a clinic that hasn't seen a TB patient in 5 years vs. a clinic that sees several TB patients per month. Is a negative pressure room required in each case? We should phase in some requirements, such as patient masks, based on patient expectations. M. Davis said that EMSA (Emergency Management Service Authority) has three sets of precautions: minimum, moderate and preferred, regarding personal protective equipment for mass casualties.

Bob Nakamura asked how the preparedness activities had impacted health care organizations.

C. Cahill said that EMSA through the HRSA has allocated money for surge capacity – including surge tents, cots, generators, and blankets. The concept is generally to put this equipment external to the facility. HRSA is just being funded for this year, it is now under the control of the Department of Health Services. Caryn Thornburg said that Alameda County hospitals had already divided the money and everyone bought some stuff. For example the Livermore Fire department got decontamination showers. Each city did it differently. San Francisco General Hospital got PAPRs and other PPE. Her facility got showers and surge tents but no money for training. At best, they got 36 people trained. Roger Richter said that he is on a statewide task force overseeing HRSA. The second year money is delayed more than one year because it was being distributed by county health departments. Now the Department of Health Services has taken it back. D. Caraveo said that AMR had gotten some money, but not much. J. Abernathy said that they had purchased some PAPRs but no batteries. In terms of surge capacity, they are looking at external, not internal facilities at the emergency department. M. Davis said there was a focus on interoperability. J. Mehring asked who had decided that training not be funded. M. Davis responded that the CDC has divided preparedness into different areas. Area "G" is training, and they haven't been able to fill that area out yet. E. Eck said that hospitals, clinics and homeless shelters can't pick up the tab for services the state is unwilling to do. It is important to provide guidance and a framework.

B. Nakamura asked what the appropriate engineering controls are for clinics. F. Myers said that high risk procedures need 12 air changes per hour (ACH) and similar controls, but it is almost impossible to implement that in existing facilities. We should give options and some flexibility. C. Cahill said that the regulations require existing hospitals to provide 6 ACH or more, and do not require an upgrade unless there is a major renovations. Neil Kellman said that current requirements are more strict, and are revised every three years. But if a facility is built according to code, they can't require an upgrade. In general a broad awareness on the part of the hospitals encourages them to upgrade the negative pressure rooms, but OSHPD can't force an upgrade unless there is a renovation. C. Cahill said that current requirements are 1 negative pressure room per 35 beds, and one in the emergency department, but without a renovation, there's no requirement to upgrade. N. Kellman said that the code states that if an ED, radiology suite, or clinic is put in, it must be done a certain way.

K. White said that in the uncontrollable EMS setting, they do high hazard procedures, and PPE is the only line of defense. What about identifying low-tech controls, and work practices. J. Abernathy said you need to protect employees by using personal protective equipment and work practices to make up for the low tech environment. F. Myers said that the more burdensome the government makes infection control, for example requiring 12 versus 6

ACH, the more likely small facilities are to transport respiratory cases, which creates additional risk. But in some cases, like homeless shelters, there is no alternative to transport. S. Nye said that even where the proposal excludes home health and shelters from engineering controls, you still need to protect employees.

C. Thornburg said that the standard should spell out how air changes per hour and other parameters should be documented. There should be a protocol for engineering controls. Not all systems can accept HEPA filters. Some of the engineering controls are not always realistic. M. Nicas asked if she was saying that we should allow recirculation with only 90 percent efficiency? J. Abernathy said that every six month testing on the ventilation rate is expensive. High hazard precautions should be used on TB or suspect TB cases. C. Cahill said that all high hazard procedure rooms are not equipped for 12 ACH's. Some are HEPA filtered.

E. Eck said that we should focus on the big picture -- engineering controls should be part of the exposure control plan, based on a self-assessment. How many cases are seen? Ultimately it is more cost-effective for an organization to make facility changes if they are seeing a lot of cases. The CDC framework of minimal, moderate and high levels of control is logical. J. Abernathy asked if proposed section (d)(6) is meant to apply to maintenance of HVAC systems. She suggested changing the language in (d)(8) to "may". N. Kellman said that a traditional hospital is required to have one isolation room per floor, and typically they are dispersed that way, one per floor. This may involve a lot of transporting; it may make sense to group rooms. C. Cahill said that concept is being addressed currently at UC Davis. They are creating a bio-containment unit, all under negative pressure.

J. McNary asked if people want to incorporate the BMBL (referring to the Centers for Disease Control's Biosafety in Microbiological and Biomedical Laboratories).

Respirators

J. Abernathy asked if the transport of an individual with an endo-tracheal tube with a Pall filter required a respirator? D. Caravel said that they still require people to wear a mask, but what about if you need to do an emergency procedure. J. Abernathy said that they still require an N95 respirator in surgery; It's different for anesthesia technicians, when using a Pall filter.

Annual fit-testing

F. Myers said that the data shows a low conversion rate with initial fit-testing. One organization reported 5 years of fit-test data; they haven't yet seen someone for whom a respirator failed a fit-test that it had previously passed. There isn't a need for annual fit-testing for most individuals, you could screen for weight gain or disfigurement. In response to a question regarding how many employees need to be fit-tested, D. Caraveo said that all of their employees are currently fit-tested. C. Cahill said that almost all nurses are fit-tested. J. Abernathy said that nurses are frequently floated, and the hospitals don't want to decrease their flexibility, particularly with the nurse staffing ratios. It's hard to pull nurses off the floor to do the fit-testing. It represents a huge dollar amount. This is different from general industry. In terms of outsourcing fit-testing, many of those companies don't want to do the quantitative OSHA fit test, when they can do 4 employees in 20 minutes with Bitrex.

C. Lohrstorfer said that they use Portacounts on new hires. In order to fit-test 2500 per year, they will need 2 portacounts and 2 dedicated staff members. In addition there is a hidden cost of covering floor staffing and maintaining the ratios. A fit-test takes 20-30 minutes if all goes well, if not, it may take 45 minutes.

T. Eller from AMR asked why the standard had changed. C. Thornburg said that 65 percent of their people can't pass the initial medical screening questionnaire, and therefore have to see a doctor. 75% of their ICU nurses aren't passing the questionnaire, and therefore have to see the doctor. 75% of those who see the doctor don't pass.

E. Eck said that they are not having a lot of medical disqualifications, but that the annual fit-test is a huge staffing problem -- they have 20,000 employees in California that must be fit-tested. Mitch Cohen asked if they fit-test only those identified as needing to use a respirator. D. Caraveo said they have 7,000 employees. About 25-35 percent have to see the doctor because of an answer on the initial questionnaire. J. Mehring asked what happens if someone fails and can't use a respirator? C. Thornburg said that right now, they note that in their personnel file. But if there were a bioterrorism incident, they couldn't be included in response.

C. Thornburg said that they need to fit-test 1200 people. Their doctors are not letting people use loose fitting PAPRs. E. Eck said that the PAPR is a problem for patient care. The N-95 is not a problem in patient care, but other

respirators do pose a problem. P. Persaud said that they provide initial fit-tests to everyone. They have a screening questionnaire that people complete when they get their PPD. J. Abernathy said a Veterans Administration hospital went to all PAPRs to avoid fit-testing. She has also heard that John Hopkins, as well as hospitals in San Jose and Illinois had gone to all PAPRs. They may use a surgical mask under the PAPR for infection control. P. Persaud said that in Oregon and Washington a lot of hospitals are doing fit-tests. A hospital in Texas is doing the fit-testing every year using a Portacount. Washington has required annual fit-testing since 1998. F. Myers asked what the conversion rate is, did they do medical screens every year, for example to look for weight gain? He suggested using a strong medical screen rather than annual fit-testing. He is concerned about going to all PAPR's. If there aren't enough PAPRs, and there were a SARS-type outbreak, people would be endangered.

E. Eck that that you may need to fit-test multiple sizes, and more than one brand. She doesn't know how many people have required a new fit-test based on the annual screening questionnaire, but it isn't a large number. They could verify annually if a person is still wearing a respirator and seeing patients. If so, then their familiarity and knowledge of respirator use should be current. The PAPR is a whole other challenge, and involves a lot of risks just to avoid annual fit-testing. H. Dunmeyer said that annual fit-testing poses a tremendous economic burden on hospitals, and maybe the burden should be shifted to the state, like testing for drivers' licenses. J. Mehring asked who would do the health questionnaire and fit-testing, that's the bottom line. Why not train people to do fit-testing? Are we thinking as a community regarding how to fit-test? Why not use people on modified duty. The Standards Board gave three months to do the fit-testing, and we're already in the first month -- are people ready to do it? P. Persaud said they can't fit-test 1400 people in the next two months, they could phase it in over the year.

F. Myers said that in terms of thinking outside the box, even with using volunteers for fit-testing, there is the cost of replacing staff, particularly in maintaining staffing ratios. People are making a good-faith effort to comply with the regulation. They are doing high-risk people. Eighty percent of the employees are fit-tested. In order to fit-test dietary, chaplains, etc, you need widespread fit-testing. The California Healthcare Association survey said they need more than six months for each hospital in the state to come into compliance. Employees with initial fit-tests for N95 respirators have far below the background rate of TB conversion. You won't increase protection for healthcare workers with this requirement, and it will result in more PAPR use.

Steve Smith said that if a Cal/OSHA inspector found a person wearing a respirator without an annual fit-test, they would look at the whole respirator program before issuing a citation. It is possible for facilities to phase-in this requirement by prioritizing high-risk employees.

C. Cahill said that there are 37 million people in CA, and 3000 cases of active TB, only one percent of the population. California is the 3rd highest in TB cases, and they are concentrated in the Los Angeles and San Francisco areas. Tuberculosis in long term care facilities is reportable. The 4-5 cases in employees probably result from community exposures.

Marianne O'Leary said that the problems occur before the person is identified as a TB case. There should be basic levels of precautions that preclude people having to put on N95's. S. Smith asked how often people put on a respirator? E. Eck said that in one southern California facility, they had not had a TB patient all last year. Based on that, can they afford to do annual fit-testing? Who does the medical screenings? They use an RN or high for evaluation. They have had some people do fit-testing, they plan to do 20,000 in the next three months.

M. Nicas said that we should not use the CDC or CDHS guidelines to determine what respirators should be used. You need a quantitative risk assessment. CDC and CDHS have avoided addressing acceptable risk. You could calculate risk, based on some assumptions. The CDC recommendations are not documented. If you look at pneumonic plague, which is considered to be transmitted in droplets, forty people had first degree lesions in the pulmonary region (1/3 of the cases). A surgical mask is not protective. The CDC guidelines don't spell out the criteria they use for recommending droplet precautions. Cal/OSHA needs to determine what an infectious dose is, and determine plausible levels of exposure intensity in the air. This will allow you to determine the level of risk, and figure out an appropriate respirator. This process should be completely transparent. The expert opinion approach is too susceptible to political lobbying.

J. McNary asked about situations where the respirator is to be worn with out a patient, for example in a lab. J. Abernathy raised the issue of how long respiratory protection should be required after the patient leaves the room.

M. Nicas said that during the pneumonic plague outbreak of 1918, 9 died. Two were nurses and two were doctors. The issue of protecting health care workers is critical.

Medical surveillance

E. Eck said that the employer should be required to offer influenza vaccine to all employees who provide direct patient care, and there should be a required declination. This would make it more likely that people would get the vaccine.

J. Abernathy suggested that the language in (g)(3)(C) be changed to say that prescreening shouldn't delay immunizations unless there is a CDC or similar recommendation for prescreening prior to vaccination, since some vaccinations should not be administered if it isn't necessary. F. Myers said he had some concerns regarding the medical removal section and section (B)1. that might require disclosure of information without a reason. The discussion will be continued at a future meeting.

Final comments

J. Mehring said he would like the healthcare community to be more pro-active in coming into compliance with the respiratory protection program requirements. F. Myers said he felt a sense of urgency regarding this issue -- health care needs an additional 6 months to come into compliance. J. Mehring said that speaking on behalf of the SEIU he'd like to see a best practices approach to meeting the annual fit-testing requirements, before agreeing to an extension. E. Eck said that they needed a longer phase in period. J. Fisher suggested requesting information from John Hopkins and the VA in Alabama regarding the use of PAPRs, and also that we need to arrange to get doctors' concerns. E. Eck said she'd like to understand how places who have moved to PAPR use are planning on dealing with a wide-scale event.

D. Gold and B. Nakamura said that they would try to schedule another meeting on this issue after September. The meeting was adjourned.