

**Aerosol Transmissible Disease Control  
Cal/OSHA Advisory Meeting  
December 8, 2005, Oakland CA**

Chairs: Robert Nakamura, Deborah Gold

Participants

Anne Marie Bakker, Berlex Biosciences  
Catherine Boomus, Cal/OSHA Medical Unit, Resident  
Phyllis Brown, California Nurses Association  
Juli Broyles, California Chamber of Commerce  
Sue Chen, California Department of Health Services,  
Kevin Connor, San Bernardino County Sheriff's Dept.  
Rupali Das, California Department of Health Services, OHB  
John Decker, National Institute for Occupational Safety and Health  
Enid Eck, Kaiser Permanente  
Jeff Ferrell, Cal/OSHA  
Teresa Fricke, San Bernardino County Sheriff's Department  
Candy Hanratty, Queen of the Valley Hospital  
Mike Horowitz, Cal/OSHA  
Marguerite Jackson, University of CA San Diego School of Medicine  
Lilly Kaneshige, Kaiser Permanente  
Elizabeth Katz, California Department of Health Services, OHB  
Mary Koche, Cal/OSHA Medical Unit  
Zerlyn Ladua, Alameda County Public Health Dept.  
Janet Macher, California Department of Health Services, Air Pollution Research  
Barbara Materna, California Department of Health Services, OHB  
Jennifer McNary, California Department of Health Services, OHB  
Kay McVay, RN, California Nurses Association  
John Mehring, Service Employees International Union  
Mary Mendelsohn, CACC APIC, City of Hope  
Tom Mitchell, Occupational Safety and Health Standards Board  
Kathleen Moser, San Diego TB Control, California TB Controllers Association  
Pamela Persaud, St. Joseph Health System  
Zohreh Pierow, County of Santa Clara  
Sandra Prickitt, AOHP  
Janice Prudhomme, California Department of Health Services, OHB  
Roger Richter, California Healthcare Association  
Jon Rosenberg, California Department of Health Services, OHB  
Sonia Rosenberger, University of Calif. Berkeley, EH&S  
Kenneth Smith, California Department of Health Services, retired  
Steve Smith, Cal/OSHA  
Margaret Song, UCLA Medical School (resident)  
Kevin Thompson, Cal-OSHA Reporter  
Nancy Van Zwalenburg, public  
Len Welsh, Acting Chief, Cal/OSHA

Vickie Wells, San Francisco Department of Public Health

Paul White, Sutter Health

Adam Wolfe, California Department of Corrections and Rehabilitation

### **Summary of Key Points**

1. Many participants supported creating simplified exposure control plan requirements for primary care, homeless shelters, and similar environments.
2. The National Institute for Occupational Safety and Health (NIOSH) is planning research on fit-test intervals for respirators. NIOSH is looking for partners to provide data. In addition, Cal/OSHA is still seeking data from employers on this issue. Respirator selection, including the use of higher levels of respiratory protection for high hazard procedures was also discussed.
3. There is a need to clarify which provisions are applicable to annual influenza, and in which environments.
4. There is a need to protect the confidentiality of patients and employees in the section on medical surveillance, including HIPAA [Health Insurance Portability and Accountability Act] concerns. References to the source patient should ensure that the identity of that patient is protected. The employee medical records should not include the employee's social security number.

### **Detailed Minutes**

Robert Nakamura, of the Division's Research and Standards staff, called the meeting to order and apologized for the change of location which was done to accommodate more attendees than originally anticipated. Attendees were asked to identify themselves by name and affiliation.

### **Introduction**

Len Welsh welcomed the participants. He explained aerosol transmissible diseases (ATD) was a new name for the project that had evolved through a recent series of advisory meetings over the past two years. He said that the effort to protect employees against infectious diseases has a much longer history, and that California has been a leader in this area. He noted that many of the people participating in this process had been involved in developing the bloodborne pathogen standard, and the proposed tuberculosis standard, as well as the recent bloodborne pathogens amendments. The current project started after Federal OSHA decided not to adopt a TB standard. At that time DOSH [Division of Occupational Safety and Health, Cal/OSHA] had a TB placeholder regulation which contained the text of the old respirator standard, and applied to the use of respirators to protect against TB. Prior to dropping the TB rulemaking, Federal OSHA had changed its respirator standard, to require, among other things, annual fit-testing. When they dropped the TB rulemaking, Federal OSHA then withdrew its TB respirator standard, and placed the use of respirators for TB under the general industry regulation. Cal/OSHA had six months to adjust the Cal/OSHA standards so that we had

similar requirements, which the Standards Board [Occupational Safety and Health Standards Board] did in 2004.

L. Welsh said that in the process of this rulemaking, the Division was asked to look holistically at how to create a vertical standard to protect against all airborne transmissible diseases. He said that he thought the chances of a more comprehensive standard are better at this point, than a standard that addresses only TB, given the post 9-11 thinking. It makes sense, in terms of emergency response, to improve the ability to respond. L. Welsh added that in an emergency, health care will have a lot of detailed responsibilities with specialized requirements, but that the public health pronouncements in a pandemic would probably come from the government. He concluded that the proposed standard “had the feel of a winner” and stated he was hopeful of bringing the standard to the Standards Board in early 2006.

### **Respirator Availability Concern**

Enid Eck raised a concern that the requirement for annual fit testing of N95 respirators would affect the supply. She stated Kaiser had fit-tested 29,000 employees in Southern California, which meant a lot of respirators consumed. Suppliers might not want to admit to a shortage, but she believed they have already occurred on a short term basis.

L. Welsh replied that supply chain shortages are likely; we should be sensitive to conservation of supply issues. He said that if attendees experienced shortages, they should let Division staff know.

Deborah Gold said she had contacted suppliers about the issue. After SARS they have made some adjustments to improve their ability to meet surge demands. The Division will contact respirator manufacturers after the first of the year to determine what can be done to ensure an adequate supply of respirators in California. There is also supposed to be a national stockpile. John Decker said that the national stockpile does contain some N95 respirators, perhaps 3 million. E. Eck noted it seems wasteful that [N95] respirators are discarded after fit testing.

Marguerite Jackson commented that the N95s are supposed to be for one use only but there are occasions when people put them in pockets and use one all day. Maybe the standard should say that there could be more than one use in a surge, to anticipate probable shortages. L. Welsh replied that someone could draft such a procedure for review by DOSH. D. Gold added that there is nothing in the standard now, either way, only a requirement for the employer to develop procedures for use and storage. One of the problems is that N95s tend to get deformed if you put them in a pocket. So if an employer is thinking about reuse in their program they need to provide training so employees will be aware of the tendency to deform and will know how to properly store the respirators to minimize problems.

### **Introduction to the discussion draft**

D. Gold explained that the current draft is still not an official proposal, and that the project is not in rulemaking at this point. She explained that if there is a proposal, there will be a time for formal comments. She explained that this is the 7<sup>th</sup> meeting overall on

this subject, and the 4<sup>th</sup> general meeting. D. Gold explained that the proposal that has developed includes a phased approach to protecting employees against aerosol transmissible diseases, which includes initial simple source control measures, such as cough etiquette, based on recognition of symptoms until there is a specific diagnosis. Employees, particularly front-line employees, would be trained in symptom recognition and how to protect themselves. Then, as the disease presented by the patient is identified, more specific control measures would be implemented in accordance with established infection control and public health recommendations, such as the HICPAC [Healthcare Infection Control Practices Advisory Committee] guidelines.

D. Gold noted some major changes that have been made in the discussion draft for this meeting, based mostly on input from previous meetings: The standard is now called “Aerosol Transmissible Diseases” (ATD) in order to avoid confusion with other terms, like “airborne” or “respiratory” that have specialized and sometimes conflicting meanings to the infection control, medical, or industrial hygiene professions. ATD addresses diseases identified by HICPAC and the Title 17 [California Code of Regulations] listing of reportable major transmissible diseases. ATD does not include the common cold.

Some of the major changes in this draft include:

- 1) The “Scope” section has been narrowed. Social services have been taken out because we didn’t find evidence for increased risk. Added to the list were eradication workers who destroy the animals that have diseases transmissible to humans.
- 2) The term “exposure incidents” has been redefined and tied to Title 17. We have been told that SARS is being added to the list in Title 17.
- 3) Additional language has been added to subsection (c) to address communication to employees.
- 4) The “medical removal” section in previous drafts has been changed to address only a precautionary removal period where an employee can not perform their usual assignment because they were involved in an exposure incident, and may be infectious. Usually this is a short period, of approximately two weeks.
- 5) Some unnecessary definitions have been removed.
- 6) Respirator use has different categories that will be discussed later today. There are also changes in regards to powered air purifying respirators (PAPRs).

### **HICPAC Update**

M. Jackson gave an update on the revised HICPAC standards. She said that the CDC [Centers for Disease Control] guidelines for infection control, of which she is a co-author, have been developing on a parallel track. After five and a half years, HICPAC has approved its Guidelines for Healthcare Isolation Procedures and sent it to CDC for their approval and publication in MMWR [Morbidity and Mortality Weekly Report] in 2006. The draft of their appendix A, [a list of diseases and isolation precautions] is one of this meeting’s handouts. The draft has a few minor errors that will be corrected. There have been no changes in airborne vs. droplet categories.

M. Jackson added, at the CDC TB Elimination Branch, the final revision on the guidelines for TB reduction in health care settings has a 12/30/05 publication date. It is

rumored that this has been cleared at CDC and MMWR. The screening and management of healthcare workers has not changed from the final draft. Kathleen Moser agreed that there were no big changes from the draft in regards to health care workers. She said that once published, the documents will be on-line or available for ordering at the CDC website. Jon Rosenberg asked M. Jackson if during this process HICPAC had considered that their recommendations might become the basis for creating enforceable regulations (like the Bloodborne Pathogen regulation) rather than “guidelines.” M. Jackson replied that NIOSH [The National Institute for Occupational Safety and Health] had been very involved with HICPAC and with OSHA, but that CDC leans towards guidelines instead of regulations. L. Welsh said that they might not know in advance that their work would be incorporated into a regulation, but that they were aware of the possibility that regulators would rely on their recommendations. John Decker asked M. Jackson if there had been any discussion on recommendations for specific diseases or conditions, such as SARS. She replied that the guidelines made reference to other documents that gave disease-specific guidance.

### **NIOSH Update**

J. Decker gave an update on NIOSH activities relating to respirator use for infection control. He reported that beginning this year there was a new two or three year project to evaluate the frequency of fit testing to see if it should be more or less frequent. NIOSH is seeking partners for collecting good data on actual testing results. There is also a study evaluating facial characteristics via computer modeling so as to identify facial shapes for respirator manufacturers to build the best fitting respirators. He said current designs are based on 1967 data derived from a limited set of facial characteristics. Phyllis Brown asked if NIOSH now recommends annual fit testing. J. Decker replied that yes, NIOSH currently recommends annual fit testing.

### **Subsection (f) -- Respiratory Protection**

R. Nakamura reviewed the agenda. He said that the requirements to provide powered air purifying respirators (PAPR) had been reduced in this draft to apply to high-risk procedures, but he noted that N95 respirators were the minimum protection level that would be allowed in the standard.

Barbara Materna asked about the wording “to make available,” [in subsection (f)(4)(B)] and noted that protection factors of half-face elastomeric respirators and PAPR respirators differed greatly. She wondered if the proposed language was equating the two types of respirator. R. Nakamura said that staff did not mean to equate the two types of respirators; they had been responding to concerns about specifying PAPR use in the previous draft. B. Materna asked if this meant that basically that the employer needs to provide alternatives to the N95 for high risk procedures? B. Nakamura said that was the idea. M. Jackson pointed out that the burden is on the employer to provide. You can’t require the employee to use a PAPR. R. Nakamura responded that the employer would have to document why it wouldn’t be feasible to utilize a PAPR. D. Gold added that the revision pares down PAPR use for procedures where its use is most accepted. If it is not feasible, you don’t have to make it available. If it is feasible you must make it available. The Feds have never readdressed the Assigned Protection Factors (APF)—a half-

facepiece respirator has an APF of 10, the same as an N95, while full-facepiece respirators have 20, 50, or 100, depending upon the standard or guideline. The employer would have to make a determination in their exposure control plan, for example, whether to require a PAPR or other elastomeric respirator for bronchoscopies. It's not an individual case by case decision. L. Welsh stated that a clarification was needed in this language regarding making both types of respirator available.

John Mehring asked if an employer could overrule the PAPR choice of an employee. L. Welsh replied that would be allowed if there is an institutional patient care issue regarding the effect on patient safety. R. Nakamura added it has been remarked at several meetings that some PAPRs might obstruct vision. A handout was provided that showed one type of PAPR, made by 3M, that seemed to be minimally obstructive. J. Rosenberg asked if failure to have PAPRs is allowable, and D. Gold responded it was, if a determination has been made that their use is not feasible. J. Rosenberg asked what if the employer has not previously thought about it? D. Gold and L. Welsh replied that the employer must have made a determination based on an assessment of using a PAPR in the specific setting.

V. Wells commented that the Division and the Advisory Committee needs to decide what respirators are adequate noting that if N95's are adequate more expensive devices should not also be mandated. R. Nakamura replied that the last draft of the standard had specified PAPRs under several circumstances, but this provision had drawn a lot of objections. It was revised in this draft to apply to high risk procedures, and to allow the employer to determine whether this use was feasible, while still leaving some provision for employees to have better protection in high risk situations where it is feasible. Anne Marie Bakker remarked that what the employer selects comes down to evaluation and that should be specified in the regulation. R. Nakamura replied that the draft language was an attempt to do that. J. Rosenberg stated there are various procedures such as nebulized medications or endotracheal sections, that are not all high risk procedures. D. Gold referred participants to the article in CHEST [Cardiopulmonary and Critical Care Journal handout] which contains recommendations and consensus of 2005. They recommend using PAPRs for bronchoscopies. She suggested that the section may need to specify more protective respirators for high risk procedures with high risk diseases, like SARS or TB. She added that sometimes additional precautions are needed when the disease is unknown and asked if the group would be more comfortable with that approach. E. Eck said that would be better. For example, if SARS is suspected, an employee will be more likely to ask for a PAPR

L. Welsh stated the factors regarding the need for PAPR were 1)transmissibility – which is effected both by the pathogen and the procedure, 2)severity of disease, and, 3) feasibility of use in the procedure. E. Eck said the factors should be included in employee training. Sue Chen asked if this would apply to every intubation? D. Gold responded that this could be clarified in section (d), in that the transmissibility of the disease should enter into the assessment. For example, respiratory protection for the same procedures might be different when dealing with a patient with cancer than it would be for a patient with tuberculosis.

M. Jackson asked what to do about suctioning? They have had difficulty even getting employees to use splash protection for suctioning, and they have a hard time designating it as a high hazard procedure, since it's done so frequently. She concurred with Enid Eck about the need to include this information in employee training. D. Gold asked participants to email DOSH regarding which procedures should be included as high hazard, and which should not. She said that they would try to make this section more clear, and to reflect that PAPRs are only required when employees are potentially exposed to high risk diseases and procedures, as it seems there is some consensus on that approach. R. Nakamura added that if participants think a certain aerosol generating procedure is not a high hazard procedure, it would be helpful for them to provide a rationale to the Division.

Ken Smith expressed concern about virus-sized particles for which N95s are insufficient. Some DHS employees who are dealing with the most hazardous strains inside Biosafety Level III, still wanted a PAPR. And there is a problem if there is a risk of other transmission routes. L. Welsh acknowledged the concern that respirators are imperfect but the group must work with what it has. J. Mehring stated that workers reading the standard would want an example of something not being feasible. He will send in an example. J. Decker suggested defining more terms, such as high hazard procedure and feasible.

K. Moser asked about section (f)(5)(C) regarding transport in an enclosed vehicle and who is to be masked. D. Gold answered that the mask applies to the patient. If the patient is not masked, then a respirator should be worn by the transporter unless it interferes with the operation of the vehicle. M. Jackson said that when people in hallways see a patient being transported with a mask, or see the employee transporting the patient is wearing a respirator, they question whether the other people in the area should be masked. D. Gold said that the transporter has the longest duration of exposure, and is in the immediate vicinity of the patient. If someone passes you in the hallway, there isn't much exposure time. It is not really possible to eliminate all risk, the issue is risk reduction for those most exposed. Is ten minutes of exposure enough time to transmit a disease? Dr. Catanzaro's research has found transmission under some circumstances in short periods of exposure. M. Jackson said it would help to have a similar explanation why the transporters and not the people, in the hall are masked. D. Gold said it that would probably be included in explanatory documents. J. Mehring noted it is the difference between high and low risk due to duration.

R. Nakamura began the discussion by mentioning that a subcommittee is attempting to develop an alternative medical questionnaire that could be used under this standard, instead of the more comprehensive one in Section 5144, Appendix C. It would probably be included as Appendix B of this standard. When the work is completed, the draft will be posted on the advisory committee's webpage. Jennifer McNary asked if the alternative questionnaire would apply to all respirator users. R. Nakamura responded that many of the participants in this process felt that 8CCR 5144 appendix C had questions that don't need to be asked for N 95 users in a health care setting. V. Wells said it would be helpful

if Appendix B were very clear as to whom that questionnaire would be administered to. "Solely for infection control" is ambiguous.

R. Nakamura explained that subsection (f)(7) now has three groups of respirator users. Initial medical evaluation and initial fit testing would be required for all users. Annual fit testing is required for employees who are assigned to duties that require the use of a respirator. Employees who are designated to use respirators during surges only can have up to a two-year fit test interval. The third group – called respirator prepared – are employees who are not currently assigned to duties requiring a respirator, and who are not assigned to surge duties requiring a respirator, but who the employer wants to be able to put into an assignment requiring respirator use if necessary. This person, who would be initially medically evaluated and fit-tested, would need to have a current fit-test prior to using a respirator.

B. Materna asked about the Note [following subsection (f)(9)] and asked whether fit-testing is not required if the respirator use is not necessary. D. Gold replied the note applied to "respirator prepared" people. V. Wells said it is hard to distinguish between respirator prepared persons and the surge category. D. Gold responded that the people designated for surge must be trained in surge infection control procedures. Respirator prepared people are those you might have as floaters and, for them, you would have to do just in time fit testing. For example, it could apply to a pediatric nurse, who gets floated to another unit to care for someone in an isolation room. The purpose of the note is to remove the requirement to have a current fit-test if the employer wants to provide an N95 respirator instead of a surgical mask to an employee who is caring for a patient who has a disease that would require droplet precautions, such as German Measles. If the employee has had the initial fit test and medical evaluation, they can be given an N95 even if their fit-test is not current. The purpose is to allow an employer to use N95s rather than surgical masks to provide better protection.

Kay McVay said that it's hard to make this sort of determination since most staff on the front line are at risk, like in the ICU, etc. There was a recent outbreak of whooping cough in Fresno, for example. Most hospitals haven't done fit-testing for 5 years. She said that she believes every RN needs to be fit-tested annually. At the time of a pandemic it's a little late to be worrying about fit testing. If you do just in time fit-testing, people will be dying. She said that it's important to err on the side of caution, although she understands that for some people, this is all about dollars.

R. Nakamura replied that the draft attempts to address preparedness with the requirement for an initial fit test for all potential respirator users. He said that Cal/OSHA has requested information from participants about changes in respirator fit between fit-tests, and we still need this information to support any change in fit-test intervals. D. Gold added that she understands the concern and comment that all RN's should be included, but under current Cal/OSHA standards, the employer decides who will be designated as respirator users. This standard wouldn't require that specific categories of employees must be respirator users, only that people who have certain exposures must use respirators.

L. Welsh further clarified that you don't violate the standard until you send someone without clearance into a situation that requires using respirators. E. Eck said she understands the intent of this approach. Some nurses don't even see patients much less have occupational exposure. But annual fit tests may not make employees take a careful thought process with coughing patients. She herself had TB converted as a freshman nurse and was on INH for a year; it was from a case that was thought to be pneumonia. She believes that annual training leads to more attentive work around patients.

K. McVay said that fit testing can be staggered throughout the year. There is no reason not to do it and it does bring potential disease transmission to the forefront of consciousness. E. Eck responded that it is more a training thing than a function of the fit test. It's important to get as much bang for the buck as possible. From an operational perspective this [tiered] approach is do-able; there will be overlap with surge, but this adds to preparedness. The ability to extend the fit-test interval for everyone to two years would be helpful. Kaiser would be happy to work with NIOSH on this fit testing frequency research project. L. Welsh said that we want the best possible protection for employees, but that right now things are a little speculative. The data may show that annual fit-testing, or even a shorter interval like six-months may be better. But without the data, we need to do something, and we think this approach is workable.

Candy Hanratty stated that this was a good start. The obstacles weren't financial as much as the time. They are looking for high risk groups and fit testing them annually. They train everyone, but they don't fit-test them annually. Fit-testing 1000 nurses with only 500 of them at the bedside is not the best use of the nurse's time.

Mary Mendelsohn said that infection control people will still have a negative emotional reaction to a requirement for annual fit-testing, so we will have some work to do. She thinks this concept can be sold with some education, and a commitment to on-going research. The people engaged in occupational health need to consider this more and conduct more research as nobody can answer if any particular frequency of fit testing correlates with worker safety. L. Welsh said he hoped that she could work with NIOSH on that issue. R. Nakamura asked if there were any further comments on this section, or if anyone had a general objection to establishing these categories of respirator users. There were none.

#### **Subsections (a) and (b) -- Definitions and Scope**

D. Gold introduced the discussion of the scope and definitions sections. She noted that the scope now included workers who eradicate animals with diseases that are potentially transmitted to humans during the eradication process. She explained that some concerns had been expressed about whether this would apply to normal poultry handling operations, and this would not. Cal/OSHA is going to plan a meeting with groups involved eradication operations and the poultry and egg industries after the first of the year. There were no comments on the scope section.

D. Gold said that in many cases, this draft does not call out TB specifically, but it is still covered by this standard because it is a disease that requires airborne infection isolation. In regards to novel or unknown pathogens, in the initial phases of SARS, what was known was that it was transmissible through the air, but it was not initially known whether droplet precautions would be sufficient. It turned out that they were not, and the CDC now recommends airborne precautions for SARS. HICPAC has categorized serious diseases that are transmitted by the airborne route, as requiring a minimum of an N95 respirator. This seems to be a protective requirement but may not be protective enough for high risk procedures. In terms of the definitions, eventually, a particular disease or pathogen is no longer novel. But until the disease is characterized and airborne transmission is ruled out, precautionary measures such as respirators and cohorting or negative pressure isolation need to be applied. M. Jackson noted that the term cohort should be defined, and offered to send the definition from HICPAC.

J. Decker noted that “newly recognized pathogen” might be construed to include each year’s annual flu. D. Gold agreed that it could be read that way from Definition 2, “new variant” and thought adding the word “significant” might take care of that. J. Decker suggested that changes in transmissibility as being a factor to mention in the definition. D. Gold said the idea is to capture significant new pathogens, whether they are newly identified, new strains, newly resurrected variants like the 1918 flu, or mutations.

K. Moser said the terminology “aerosol transmissible disease” is almost circular. At the bottom of page 7, subsection (d) seems to be a mistake in referencing airborne isolation. D. Gold responded that whether a disease is defined as requiring airborne isolation matters in subsection (d), which is control measures. The use of the term AII in subsections (d)(2) and (d)(3) on page 7 is intentional, because this subsection only applies to the subset of aerosol transmissible diseases that require AII. Similarly, most respirator provisions apply only to diseases requiring AII, not to all aerosol transmissible diseases. M. Jackson asked why droplet transmission is included if no respirators are needed. This should be clarified.

D. Gold responded that there are requirements for droplet precautions in subsection (d)(1)(A). Over the course of these meetings, it was decided to include diseases that are designated as requiring droplet precautions because they are transmissible via air in some way, even if over shorter distances. The initial source control is the same. If someone presents with symptoms of cough, fever, etc. it is necessary to take source control measures right away, for example with pertussis or mumps, which require droplet precautions. So you would take certain precautions, even though respirators may not be required. Where the CDC and HICPAC have made these recommendations we want to include them. We want to rely on the infection control community’s expertise and the consensus control measures. M. Jackson said the explanation was very helpful.

V. Wells asked if the term “aerosol transmissible diseases” includes the common cold and annual flu? D. Gold replied that HICPAC identifies significant infectious diseases. The common cold is not included. Some participants in these meetings have argued for inclusion of influenza. V. Wells noted that her infection control people interpret this as any condition that they use droplet precautions for. D. Gold responded that the section needs to be clearer about normal influenza.

E. Eck noted that reported normal influenza numbers are based on old information and estimates of actual cases are double the reports. This standard should apply in some way to influenza, but it should not require every doctor’s office to have an exposure control plan. The intent is to protect the worker. A nurse in a physician’s office is exposed to flu cases all winter. L. Welsh said that he would argue for this approach as well. There should be some application to influenza, since: 1. It conserves the resource of the worker; its ridiculous for a doctor’s office not to have flu precautions, and 2. From the emerging disease perspective this would be a prudent protective measure. D. Gold responded that a distinction between primary care vs. specialties like dermatologists has been discussed several times and the representative from the California Medical Association was present during the first discussion. E. Eck said she thought that was logical and appropriate.

V. Wells responded that she didn’t disagree, but does a front line doctor have to have the whole paperwork burden when there are only a few practical controls? Cal/OSHA should provide a simple basic program for primary care, and not require primary care physicians to develop a full plan. L. Welsh agreed.

J. Rosenberg commented that he didn’t think CDC has any definitions for ‘suspect’ diseases that are transmitted by droplets, except maybe pertussis. There is no definition of a suspect influenza case. There are a variety of signs and symptoms. People are admitted with respiratory symptoms and it may take days to identify the specific disease. You are biting off a big chunk when you add droplets, and when you add unknown novel pathogens, and it may not be workable. D. Gold responded that part of the exposure control plan concept is that the hospital makes a predetermination of what they are likely to see and the appropriate precautions. If you wait for confirmed case, its too late, the workers have been exposed and maybe disease has been transmitted. According to many studies and reports, it is necessary to cast a broad net with initial precautions and and scale down to more specific precautions once the disease has been identified. Employers are in compliance if their people have been trained and they are looking for signs and taking appropriate actions, as opposed to doing nothing.

L. Welsh noted that in the very beginning of this process, the committee agreed that early identification was important. J. Rosenberg said that from a regulatory standpoint, the necessity is vague for droplet precautions, but not airborne. D. Gold suggested he send suggestions for better language. She said that they have tried to follow HICPAC recommendations. J. Mehring added that he feels

strongly that for human influenza, we must reinforce respiratory etiquette. In these meetings, we recognized that a holistic approach was necessary. We have to teach and train on this. E. Eck noted that when a patient comes in with symptoms of a disease process, such as coughing, you don't know if it is droplet or airborne. You're right that there is not a clear syndromal clinical diagnosis or definition. Many droplet diseases are very significant in adults. If the patient is coughing, you don't know what it is. We are saying, first blanket the worker or patient, cover up the source or the access. So that in 5 days, when you've finally figured out what it is, you've prevented the exposure. J. Rosenberg responded that most adults who are hospitalized with influenza actually have pneumonia and therefore HICPAC would not require droplet precautions.

D. Gold said the hospitals should utilize these guidelines to develop exposure control plans; the purpose of the standard is to ensure that the hospitals take the precautions to protect the workers as well as to provide patient care. E. Eck suggested that the 'novel pathogen' definition, #2, should be changed to say, "that significantly modifies its transmissibility." One participant noted that the definition of "reportable aerosol transmissible disease" is diseases where HICPAC intersects with Title 17

D. Gold said they are still looking for examples for the "occupational exposure" definition. This definition impacts who will be included in the coverage of the standard, and it interacts with the scope section.

J. Rosenberg asked what labs are left out of coverage by this standard. D. Gold said some examples of laboratories that we intend to exclude would be a biotech lab working with nonpathogenic yeast or a high school bio lab, when they are not working with pathogens. Clinical labs would generally be included, and the laboratories would develop a biosafety plan.

L. Welsh suggested that J. Rosenberg send an email about coverage concerns. J. Decker noted that biosafety levels don't exactly line up with health care. D. Gold replied that subsection (e) addresses this concern, in requiring a biosafety plan. L. Welsh said the lab people should send recommendations. D. Gold added that any changes, additions or deletions to definitions, should be emailed to us within the next 3 or 4 weeks. A specific suggestion is best, or at least discussion of reasons.

There was a lunch break.

The discussion of scope resumed after lunch. S. Chen said that "health" should be added to subsection (b)(3), so that it reads "long term health care facility." M. Jackson said that the HICPAC guidelines will cover most of these facilities; it will cover prison health care, but not the rest of the jail. The HICPAC guideline also doesn't apply to shelters or day care facilities.

V. Wells asked for a clarification on subsection (b)(6). Does it cover mental health treatment too? They have mental health intake store fronts. D. Gold responded that we didn't mean for all drug treatment to be covered. We'll look for guidance from SAMHSA [Substance Abuse and Mental Health Services Administration]. K. Moser asked what "point of first contact" in subsection (b)(1) refers to. D. Gold said that the standard isn't intended to cover specialists offices, like plastic surgery, unless there is an unusual risk. She compared the approach to the Bloodborne Pathogen (BBP) standard's application. It may apply in establishments that are not typically covered, such as car rental facilities in which used needles are found by employees who clean the cars; such employers may not include all of their employees in the ECP, if they are trained in work practices that prevent contact, and are trained to contact an employee who is in the bloodborne pathogens program, to deal with the situation.

K. Moser asked if BBP applied to car rental agencies. D. Gold said they are not specifically mentioned, but the BBP standard applies in any establishment where there is occupational exposure. In places like car rental agencies, where there is an issue of employee exposure, it is applied on a case by case basis. For example, needle tagging guns that are used in retail can become contaminated with blood and passed on to another employee, creating occupational exposure. Employers could issue each worker a tagging gun to eliminate exposure, or if the tagging guns are shared, come into compliance with the requirements for BBP. This shows how some employers can limit application of standard to their establishments by implementing other policies that prevent exposure.

V. Wells said it would be helpful to clarify subsection (b)(5). Does it cover homeless shelters, drop-in centers, 24-hour sites, and temporary shelters in churches? Maybe it should list out the covered operations. D. Gold asked which operations should be included? V. Wells said the inclusion of flu and droplet provisions complicates the issue of coverage since most have procedures for TB but not for flu. V. Wells said that during the flu season, 30% of people at facility are often noted to be coughing. E. Eck asked if they couldn't provide tissues, hand cleaner and other source control measures? V. Wells said the issue is not the source control measures, it's developing an exposure control plan and the paperwork. D. Gold said the Division might be able to put out Model Programs for these types of facilities. V. Wells said you have to look at how you want this to apply to homeless outreach centers and drug abuse treatment programs. D. Gold said it would be done for doctors' offices also. V. Wells added that even if you identify the places in this category you'd have the five hours rule that is a burden. D. Gold noted that the new version had 16 hours. V. Wells said it would be best to just apply source containment and provide flu vaccine and not the rest of the program.

D. Gold responded that if a transferred case goes to the hospital there should be follow up on it. V. Wells said it's not useful for these non-standard settings to have to write exposure control plans. E. Eck suggested requiring a modified plan that would have assessment, identification of at risk employees, respiratory

protection and source containment and communication with the hospital if the person is transferred, and vaccination. D. Gold asked if she was saying this should apply only to established homeless shelters, not to temporary use of church basements? E. Eck said she was thinking of established homeless shelters. V. Wells added that you have to think this through on the homeless issue, particularly when you're including diseases requiring droplet precautions. D. Gold responded that these meetings had always recommended including diseases requiring droplet precautions, particularly because you can't tell what someone might have, based on initial symptoms. K. Moser noted that pertussis might be a problem. D. Gold asked if people wouldn't want the hospital to communicate with them after diagnosis so they could notify and treat exposed employees. J. Mehring asked if they wouldn't put this in their IIPP. D. Gold said that we could have a statement allowing this.

M. Jackson commented on communication that under HIPAA [the Health Insurance Portability and Accountability Act], a hospital cannot tell a homeless shelter about a diagnosis, but it's OK if the public health official does. D. Gold responded that she and R. Nakamura had discussed this with a Cal/OSHA lawyer who said there probably wasn't much problem with upstream communications (e.g. the homeless shelter could tell the paramedics or hospital that they suspected TB). He said that downstream communication may not be a problem, if the communication is ultimately required, such as a notification from the health department. Also, by mandating it in our regulation, we may solve this problem. She said that the Cal/OSHA legal unit will be asked to further review this issue.

V. Wells said that there needs to be a list of reportable illnesses. D. Gold said that we can do that, referencing Title 17, which is in this draft. K. McVay commented that in Contra Costa County police pick up homeless people off the streets; do we know if they get medically evaluated? D. Gold said that she thought jails are required to have medical protocols for triage, and asked if people here representing counties found that to be true. K. Connor and V. Wells said that in their counties, there is triage at the jails.

#### **Subsections (c) and (d) – Exposure Control Plan and Control Methods**

R. Nakamura introduced the discussion of subsection (c) exposure control plan (ECP), and subsection (d), which includes engineering and administrative controls and personal protective equipment. He said that the time for out of facility transfers for patients requiring airborne infection isolation was lengthened in this draft to 16 hours to address concerns raised in previous meetings.

M. Jackson suggested adding the word cleaning to the note on page 6, subsection (d)(1)(A). J. Mehring asked if the requirement for an exposure control plan in this regulation would supercede the requirement for a written TB control plan. D. Gold said that there is no current specific Cal/OSHA requirement for a TB control plan. That requirement is included as part of the Injury and Illness

Prevention Program (IIPP). This would be a separate requirement, but an employer could incorporate the ECP into an IIPP.

R. Nakamura noted that there had been some changes in this draft on the language for engineering controls. M. Jackson asked whether the requirement for 12 air changes per hour (ACH) should be for new construction only. She referred to the current CDC guidelines, which said that for existing facilities the airflow should be at least 6 ACH, which can be supplemented by HEPA filtration to achieve a minimum of 12 ACH. D. Gold responded that the difference in wording is due to the difference between building code language and Cal/OSHA language. All workplaces are “existing construction” at the time of a Cal/OSHA inspection, but they may have been built to conform to the newer building codes requiring 12 ACH. Lilly Kaneshige said she also finds the language in the draft and in the current Cal/OSHA Policy and Procedure confusing, D. Gold suggested that the Division might provide some examples. K. Smith suggested clarifying that the reference to HEPA filtration in subsection (d)(3)(D)2. is to HEPA recirculation in the room.

V. Wells asked how to decide when respirator use is still required? D. Gold referred her to subsection (f) which specifies circumstances where respirators must be used. V. Wells said that hypothetically, if a coughing homeless person refuses to wear a respirator – would everybody in the place have to then wear respirators? D. Gold replied that depended on the situation – how close people were, the time of exposure, the ventilation and other factors. K. Moser agreed with V. Wells that it would be hard to comply. V. Wells suggested taking the requirement to use respirators out of subsection (d)(3).

J. Mehring said that the language on page 7, subsection (d)(3)(A) should be about education of the patient, not just branding the patient. There should be educational materials, such as posters,

Teresa Fricke noted that for handcuffed patients, offering them a tissue won't work. A mask would cut down on the sheriff deputies' ability to control a suspect. D. Gold replied that because of similar remarks early in the advisory process, there are exemptions for field operations in this draft.

K. Moser said that the paragraph at the bottom of page 6 [subsection (d)(1)(B)] requiring the employer to have procedures to inform individuals entering the facility of source control measures, addresses J. Mehring's concern. E. Eck added that there is a difference between informing and providing education. K. Connor agreed.

#### **Subsection (e) -- Laboratories**

D. Gold began the discussion of subsection (e), laboratories. She said that because there were few people there representing laboratories, there might need to be additional discussion. Janet Macher asked what is meant by “culture” in the definition of “occupational exposure.” To her it means trying to amplify the

organism. Would it exclude handling of specimens? D. Gold replied no, it was just an example. Sonia Rosenberger suggested that the scope in laboratories be the pathogens identified by HICPAC and those requiring intensive aerosol control in the BMBL, which are BSL 3, although there are some problems with that. D. Gold responded that the idea was to refer to recommendations for laboratory precautions for pathogens in Biosafety in Microbiological and Biomedical Laboratories (BMBL). For example, Brucellosis which, while not airborne transmissible in nature, can be aerosolized in the lab and transmitted.

S. Rosenberger responded that she would like to rewrite this section with the person from the Northern CA Bio Affairs Safety Committee that was here this morning. They could combine the HICPAC list, plus anything on BL3 and above, that CDC recommends. She added that she noticed bubonic plague was on the droplet list. Has there been much thought about applying this to veterinarians, since some animals like cats might get bubonic plague? V. Wells suggested that this could be added as the examining, handling, etc. part of the eradication section. You could add the word 'treatment'." D. Gold said that may be a good idea, but would need to be discussed with the affected groups. Zohreh Pierow asked if coroners' offices and similar facilities are covered. D. Gold said that it was intended to cover coroners' offices, and they can be specifically added to the scope, if that's necessary. Catherine Boomus asked if that meant that funeral homes and mortuaries would also be covered? D. Gold said she was not aware of increased transmission risks and asked her to send information about the issue.

### **Subsection (g) -- Medical surveillance**

D. Gold introduced the discussion about subsection (g). She said that it tries to address some of the questions raised in earlier meetings, such as V. Wells' question on who decides which employees were involved in an exposure incident. This section requires the employer to consult an infection control PLCHP, who can be the local health officer established in Title 17 of the California Code of Regulations. Under Title 17, the local health officer is the health officer for the jurisdiction where the patient lives. Under this section, the employer would identify upstream employers, and would list all the potentially exposed employees. Then based on the infection control professional's opinion, a subset of employees considered to have had a significant exposure would be identified. The exposed employees are then provided medical surveillance, including, where recommended by the PLHCP, compensation for removal of the employee from normal duties during a potentially infectious period. In this draft, as recommended in previous meetings, this precautionary removal does not apply if the employee gets sick. At that point, it would move into the regular workers' compensation or sick leave systems. E. Eck asked if the medical surveillance section wasn't too heavy on TB? D. Gold responded that most of it is not specifically about TB. Subsection (g)(3) addresses surveillance for latent tuberculosis infection, which is somewhat different than other medical surveillance components because of the potentially long period of latent infection.

E. Eck referred to (g)(3)(B)(1) and noted that the information about drug susceptibility is not really about the patient, it's about the test results. The word "patient" should be taken out – just leave the word "source." She added that in subsection (g)(5)(B) updating availability information every ten days may be too frequent given resources, unless it is acceptable to simply note that a vaccine is still not available. D. Gold said it would be. E. Eck said she is willing to check every 10 days, but informing all the employees every 10 days is burdensome. K. McVay responded that employees should have the right to be kept informed, and that the information could be broadcast by email to them. An exposed employee is worrying the whole time, those ten days can seem like a lifetime. E. Eck responded that to require every ten days to give a negative message isn't reasonable. T. Fricke said if since an exposed employee would be turned over to a medical provider, she didn't think the doctor would tell the employer about the treatment status anyway. D. Gold clarified that subsection (g)(5) applies to vaccines that are provided as a preventive measure, it's not about an exposure incident. E. Eck added there was a months long unavailability of varicella vaccine. It makes more sense to require ten days from the vaccine becoming available to inform employees. T. Fricke suggested inserting 'potential' for occupational exposure incident. M. Jackson commented about page 15, Item B that social security numbers might not be good for identification purposes now, and some other employee identifier would be more appropriate. D. Gold agreed.

V. Wells referred back to the ten day issue and said that flu vaccination isn't always recommended. J. Macher added that the regulation text should be consistent in referring to either calendar days or working days. M. Jackson pointed out that measles has a delay before the period of infectivity starts, and wonders how this is addressed by the standard. D Gold replied that was the reason for referring to the PLHCP. M. Jackson said there were a number of references, including the CDC and ACIP, that give recommendations regarding infectious periods.

Sandra Prickitt asked about the application of the TB surveillance provisions on page 13, subsection (g)(3)(A) to "low risk" areas. D. Gold replied that there are examples of low risk counties where clusters of TB conversions occurred; people move around, and so, just because an area appears to be low prevalence, the jail population, for example, may not be. Therefore the proposal, and Cal/OSHA's current Policy and Procedure isn't based on the TB prevalence in a geographic area. It's true that when the rate of infection is low in a population, you get more false positives by doing surveillance. But Cal/OSHA's concern is that without medical surveillance, you won't know if employees are at risk. K. Moser said that she thought that exempting out low risk areas might be appropriate and deserved further consideration. D. Gold said they would look into it. She said that Cal/OSHA's concern is that although the population risk may be low, for the employees in health care facilities and jails, a few cases are a risk to them, and it isn't protective of employees to exempt them based on the population of the area.

**Subsection (h) -- Training**

R. Nakamura introduced the section on training. E. Eck noted that J. Mehring's concern about how source control measures are communicated to patients and visitors should be addressed in the employee training section. Employee training should address a script or similar measures on how to share information with patients. R. Nakamura asked J. Mehring if he still felt that the frontline staff should not be the primary means for informing the public about source control protocols, etc. J. Mehring agreed that he did raise the concern and has not changed his mind. K. McVay said the best chance to educate patients is talking to patients, not with a piece of paper.

S. Rosenberger asked if the employee training needed to be interactive with someone trained to answer? J. Mehring said he felt it should and thought the training would probably occur with Bloodborne Pathogen training which already has the requirement for someone to answer questions. M. Jackson added it might occur with the IIPP training. K. McVay said that the best opportunity to educate the staff and the patient is when the staff goes in to educate the patient. There needs to be an in-service for hospital personnel. It is better to have personal contact during the training with infection control personnel, rather than relying on computers and trainings designed by people who never touched a patient. D. Gold said that there needs to be a trained person available to answer questions, but the draft does not require in-person training. V. Wells said she generally supports in-person training, but that making in-person training a requirement would be extremely burdensome to smaller employers. E. Eck said that people learn in a variety of ways. Sometimes it's appropriate to use computers, sometimes having an in-person session, sometimes a video. It's important that the 'knowledgeable in the subject' language be added to the section. If you add that you wouldn't restrict the modality (e.g., videos) of how you do the training.

**Subsection (i) -- Recordkeeping**

D. Gold asked participants to send comments on the recordkeeping section (i). K. Smith noted that in (i)(1)(B)(1), the social security number appears again. D. Gold said it will be reviewed and probably changed. K. Smith asked who keeps the medical records. D. Gold responded that the employer is responsible to maintain them. In the hospital setting, this is easy. The employer must ensure sufficient access, which may not be possible if records are in the hands of private parties. Recordkeeping must meet the confidentiality requirements J. Mehring asked to what extent Log 300 requirements would apply. R. Nakamura said that TB conversions and occupational illnesses are required to be recorded.

T. Fricke asked about the circumstance when an arrestee in the field claims to have TB. D. Gold responded that a department should develop procedures to address that, such as whether the person is taken to a medical facility, or how to provide control measures at the jail until the person's status is known.

**Final comments**

Phyllis Brown said that she was concerned about the practical aspects. In home health care, there is a stigma about wearing a mask. Twice she wore a mask into someone's home. She had not been fit-tested for six years, until she was tested recently. She likes the disposable masks, but feels that the saccharine fit-test method is subjective. She's not sure what they would do if there were a SARS incident. Like universal precautions, this needs to be something that people practice, and it needs to be something people feel comfortable with. She loves this guideline, but implementation will take time.

A participant asked if all law enforcement personnel would be required to get TB tests and to wear respiratory protection under this proposal. D. Gold responded that TB testing would be required to be offered, but that requirements that an employee be tested come from the public health people. Respirators for TB are required now. J. Mehring asked who specifically gets TB skin tests. K. Moser responded that basically annual tests are required in acute care, long-term care facilities, acute psychiatric, and intermediate care. School teachers are also tested, but at different frequency. V. Wells said that all employees in the San Francisco Department of Public Health are not required to be tested. Adam Wolfe said that all Department of Corrections and Rehabilitation personnel are screened. K. Connor said that about 30 percent of his officers are tested, and about 30 percent get retested after an exposure incident.

***Next Steps***

D. Gold said the alternate medical questionnaire would be further edited with the assistance of the subcommittee. A new draft standard, incorporating today's session will be circulated to participants as soon as possible. Another meeting is not planned unless a lot of participants feel there is a need to meet. The DOSH staff will try to refine the scope and revise other sections to address the comments. Interested parties are asked to send any additional comments or suggestions within the next four weeks. Once there is a draft, DOSH will send it to the Standards Board, where the staff there will also review it. During this process, it is likely there will be some changes. It will probably take about three to four months for the Standards Board staff review, and then it will be noticed for official rulemaking. The notice will contain a date for a public hearing on the proposal, as well as a public comment period.

D. Gold said that Cal/OSHA really appreciates the participants' time and expertise, and told people to let them know if they feel we need another meeting. There will be a meeting with the poultry and egg people regarding eradication, and there may be other meetings with subgroups, as needed. She said that they would keep the participants informed via e-mail as the process moves forward, and that people should feel free to contact Bob or her with any suggestions, questions or concerns.

The meeting was adjourned.