Airborne Infectious Disease – Law Enforcement and Corrections
Cal/OSHA Advisory Meeting
January 18, 2005, Oakland CA

Chairs: Bob Nakamura, Deborah Gold, Senior Industrial Hygienists, Cal/OSHA

Participants
Vicky Wells, San Francisco Department of Public Health
Gladys Hradecky, RN, San Diego Sheriff’s Department
Bruce Fukayama, Contra Costa County Sheriff, Forensic Services Div
Anita Gopaul, Department of Corrections
Penny Villalva, Department of Corrections
David Harris, Port of San Diego
Kevin Connor, RN, San Bernardino County Sheriff
Mike Gugino, Department of Corrections
Teresa Fricke, San Bernardino County Sheriff
Al Guzman, Contra Costa Office of the Sheriff
Charity Comaddo-Nicolas, Contra Costa Risk Management
Alisha Stottsberry, RN, California Forensic Medical Group
John Lincoln, Lake County Safety Officer
Sharlene Ramey, Fresno County Sheriff
Harold Shumate, Fresno Sheriff
Tom Mitchell, Occupational Safety and Health Standards Board
B. Woodworth, Mendocino County
Mark Chro, PhD, County of Napa
Chris Fisher, County of Lake
David Pascoe, Contra Costa County Sheriffs
John Mehring, Service Employees International Union
Janice Prudhomme, Department of Health Services, Occupational Health Branch
Willie Sapeta, Lake County Fire
Elaine Hustedt, California Forensic Medical Group
Zohreh Pierow, Santa Clara County

Summary of Key Points

1. It was generally agreed that requirements based on health care settings for protective measures at the “point of initial contact,” are not applicable to law enforcement field operations. However, some control measures may be applied in the field or during transport. Screening should take place as early as possible. For many departments that occurs at the point of entry into a jail or other facility, while some departments do some screening at the scene. Several participants believed that regulations should permit and require that information regarding the infectious disease status be transmitted to effected law enforcement and corrections personnel.

2. Many participants expressed concern regarding the ability of sheriff’s departments to place a person in a negative pressure room within five hours, when
they are suspected or confirmed as having tuberculosis or other disease requiring airborne infection isolation.

3. Respirator purchase and assignment are increasing in law enforcement and corrections, in part due to homeland security grants. The California Department of Corrections is medically evaluating and fit-testing 21,000 corrections officers. Some participants questioned the necessity for annual fit-testing for respirators.

4. The Department of Corrections requires initial and annual testing for latent tuberculosis infection (LTBI) for all corrections officers. Many police and sheriff’s departments either require or provide initial LTBI screening for employees. Most departments represented at this meeting do not require annual testing for LTBI for employees.

5. Participants would like to see another meeting for law enforcement and corrections after the next general meeting.

Detailed minutes

Bob Nakamura opened the meeting, and explained the history of this process, and the California rulemaking process. When federal OSHA revised their respiratory protection standard (29 CFR 1910.134) they were already in the process of rulemaking on tuberculosis, so they kept the existing respirator standard for TB respirators only. Cal/OSHA took the same action. Federal OSHA dropped rulemaking on TB in 2002, and at the end of 2003 placed TB respirator use under the general industry respiratory protection standard. In June of 2004, the California Occupational Safety and Health Standards Board (Standards Board) took an equivalent action. Several participants at the Standards Board hearing requested that Cal/OSHA start an advisory process on a broader airborne infectious disease standard. The first meeting was held on July 26, 2004 and a subsequent meeting was held on November 5. Although there was some participation from corrections and law enforcement, Cal/OSHA decided to hold a special meeting in order to ensure that we get feedback from these agencies. The purpose of this meeting is to discuss the specific concerns of law enforcement and corrections regarding a standard for airborne infectious diseases in the workplace.

The Cal/OSHA rulemaking process occurs under the authority of the Administrative Procedures Act. This meeting is a pre-rulemaking activity. If Cal/OSHA believes that there is a need for a standard, then it will make a proposal to the Standards Board. The Standards Board would then hold a public hearing on the proposal, and also accept written comments. The Standards Board is comprised of seven appointed members, representing health and safety professionals, members of the public, employers and employees. He pointed out the handout that has a chart describing the process in detail.

Specific Hazards and Issues for Law Enforcement and Corrections

B. Nakamura then asked people to address the first item on the agenda, which was “What law enforcement and correctional facilities hazards and issues should the standard address? What are the specific issues for police, sheriff’s departments and prisons?”
Gladys Hradecky said that in her department they have intake symptom screening for TB for all inmates. Anyone who meets the criteria of the screening is pulled out of the general population, masked, and placed in negative pressure cells. Charity Comaddo-Nicolas said that in Contra Costa County, they train deputies to detect any signs of TB during intake, and direct suspect cases to a hospital for testing. If a person exhibits signs while in detention, they have negative pressure cells. N95 respirators are available to all of their staff, and people have been medically screened and fit-tested. Alisha Stottsberry said that smaller jails don’t have negative pressure cells. In her facilities they do a TB symptom screen prior to intake, and if there is a suspect case, take them to an emergency room. If the person is already in the facility when exhibiting symptoms, they contact their health department.

Chris Fisher said that he was concerned regarding the lack of transmission of information about the disease status of people at crime scenes. He said that the laws and rules work against employee safety. HIPAA and the Ryan White Act prevent the dispatchers from providing information over the radio when a crime scene involves someone that has a disease, so they don’t know to take precautions at a bloody crime scene. B. Nakamura said that the bloodborne pathogens standard requires universal precautions. Willie Sapeta said that under HIPAA there is some information transmitted between medical providers, but information is not transmitted to law enforcement, so they may not know if there is active TB.

Dave Pascoe said that if someone is providing care they should have the right to know about the infectious disease status of a person. A deputy first responding to a crime scene may not have the required personal protective equipment (PPE) on at the time. They can’t put the information over the dispatch system. There may also be a problem in getting the medical staff to provide information to the deputies in a jail. There is also a problem in that when an individual is transported, the medical records are carried to and from medical personnel by the deputies in a sealed envelope. The law enforcement people don’t get the info. The standard should make it clear that the information should be communicated, and that it can be communicated.

Vicky Wells said that in San Francisco, anyone who is potentially infectious is taken directly to the hospital. Where possible, the person would be masked for transport. She is concerned that if people think they will get information on infectious disease status, they will open themselves to risk, rather than take universal precautions. It is important to provide any information about an airborne disease like TB, but for bloodborne pathogens, you need to assure that blood and bodily fluids are all treated as potentially infectious. There are a huge number of people who are infected with hepatitis C.

D. Pascoe said that you can’t plan for the initial encounters faced by law enforcement. People who initially appear non-combative may become combative. Where do you draw the line. C. Comaddo-Nicolas said that the draft’s language in (f)(2)F is not appropriate for law enforcement. You don’t have the time at an initial encounter to put on a respirator or make an assessment. It’s different in a fixed facility – in the fixed facilities they have tried to comply with the recommendations and standards.
John Mehring said that it’s important not to place the burden on the worker each time to make a decision regarding how to prevent the escape of infectious agents from the patient’s mouth. You need to educate the person regarding the necessity to cover their mouth, and to mask themselves, if they are coughing. W. Sapeta said that it is different in law enforcement. When they get on site, and ask someone to mask themselves, people don’t cooperate. Maybe one in ten would cooperate. Others will do everything they can to defy the officers, they will spit, or rip off the mask. C. Fisher said that the people law enforcement deals with don’t want to be dealing with them.

Al Guzman asked why Cal/OSHA was holding this meeting, and developing a standard at this time. B. Nakamura said that while a lot of the impetus for this effort came from health care, that TB in California is not decreasing, and there have been a number of problems in correctional facilities. D. Gold said that in the past couple of years there had been several clusters of conversions or active cases in prisons and jails. Guzman said that he had been a police chief in Alameda County prior to his current position with Contra Costa County. He wasn’t aware of TB in any officer in Alameda County, which isn’t to say it doesn’t happen. A standard would cost law enforcement a lot of money. There should be a clearly identified problem. There may have been TB cases, but it’s not an epidemic. D. Pascoe asked why federal OSHA had dropped rulemaking on TB. B. Nakamura explained that OSHA had announced in 2002 that they were dropping rulemaking because cases of TB had declined nationwide. But that’s not true in California. Also, federal OSHA had placed the use of respirators for TB under general industry, and a similar action in California had raised some concerns.

Mike Gugino said that they occasionally get information from other institutions about the infectious status of an inmate, but sometimes transfers happen so quickly that no information is received. A. Stottsberry said that Title 15 addresses that issue.

G. Hradecky said that she had checked on TB in her system – 9 years ago there was an index case from outside the system. She said that their control measures seem to work, because there have been no conversions. They use symptom screening and have negative pressure cells in three facilities. They offer annual PPD testing to officers, but a low percentage of them participate in the screening program. Another participant said that Contra Costa County had 10 TB exposures, but no cases. They require annual PPD. Mike Gugino said that they require skin testing as a condition of employment. In the past year they had 12 employee conversions and 86 inmate conversions. D. Gold asked him if he had any information on the prison that had reported about 100 inmate conversions last year, but he said he wasn’t aware of that situation. W. Sapeta said that in his fire department they had an annual refresher with their first aid. The instruction was to avoid face to face contact, and improve ventilation by opening windows. The N95 is not very effective for law enforcement because it is easily displaced. A mask is only good if you have control of the scene. PPE doesn’t protect you when you’re wrestling with someone.

V. Wells said that she saw two different situations. In the field, a lot is unknown and uncontrolled. There can be some identification of suspect cases. The highest exposures...
can occur during transport. Once you’re in a facility, there is a lot more control. W. Sapeta said that you can open the back window of the vehicles and turn on the ventilation to create negative pressure. But the transport area is about four feet by four feet, so quarters can be pretty close. D. Pascoe said this can lead to unanticipated costs – for example, if a window is partially open it is easier to break. So then you need to spend money to secure windows, which becomes cost prohibitive for a fleet of 200 cars. The transportation vans have no windows, and they have vents in the back end. B. Nakamura asked if the driver or operator of the transport vans wear a mask in any of the agencies present. There was no response.

Mark Chro said that TB is in some way the most innocuous of the diseases. You don’t know what the hazards are that you have to protect against. In his county, only the SWAT team and hazmat team are trained and equipped for Level A. Law enforcement is not trained and equipped. It is hard to get fit-tests and medical evaluations done. You need to develop capability for different levels of hazards. They test all inmates for latent tuberculosis infection, he is not aware of any conversions.

John Lincoln said that he is concerned about language in the draft standard that risk reduction procedures be implemented at the point of first contact. For law enforcement, that is impractical – the officer may be dealing with the more immediate risk of a bullet, as compared to the risk of tuberculosis infection. D. Gold explained that the draft regulation is centered around the employer’s infection control program, which would define what measures need to be taken at what point. She agreed that the definition of point of first contact should be clarified in the next draft to take into account the concerns expressed at this meeting. J. Lincoln said that his agency does have an infection control program. A. Guzman said that he agreed that the application to law enforcement field operations, and the point of first contact, needs clarification. They can have complications if they try to mask a person being taken into custody. Putting a mask on someone tells them they have a weapon they can use – they can spit at the officer. He said he has no fundamental problem with the idea of a standard. W. Sapeta agreed that it’s important to clarify how the point of first contact applies to law enforcement.

M. Chro said that the draft is confusing. There are too many different pathways. It should simply say that the intent is to provide as much risk protection as we can from this point to this point. That will provide institutional buy-in. Education is key for first responders. There is concern with new diseases like SARS, super-flu’s etc. B. Nakamura asked if people thought the draft should focus on training and vaccinations. One participant suggested publishing an enforcement policy and procedure at the same time as a new standard.

C. Comaddo-Nicolas said that patrol officers have concerns regarding their safety. A respirator can be used against them. Engineering controls in patrol cars that prevent air exchange between the front and back may be better. D. Pascoe said that trying to get a mask on a person is a hazard to the officer, and it is difficult to keep it on them. He has some concern regarding radio communications, if the officer is wearing a respirator. In detention facilities, it’s easy to implement infection control procedures. The RN evaluates
everyone. But how can you ask officers on the street to do a medical assessment. There should be a clear definition of the term “potentially infectious.” V. Wells said that police have quick interactions – there’s not a lot of opportunity to make assessments.

A participant asked if Cal/OSHA was planning to provide exceptions based on the TB rate in each county. B. Nakamura said we probably would not, because the standard addresses more than TB, and because patients or inmates don’t always come from the county they are encountered in. A participant asked if there are any studies of the risk from transporting someone with the windows open, and whether this standard would apply to taxis. John Mehring said that most taxi drivers aren’t employees. Vicky Wells said that there is normally a barrier between the front and back of a patrol car. It can be augmented with plexiglas, although that would not provide complete protection. Taxi drivers are not exposed in the way that law enforcement personnel are, because cab rides are usually reasonably short, and cab drivers don’t have to pick someone up.

A. Guzman said that we have an obligation to protect workers, but this draft paints with a broad brush. You can’t put plexiglas in each patrol car – Plexiglas is more expensive than mesh. W. Sapeta said that OSHA should be able to come on site without issuing citations, and provide advice. V. Wells suggested that they contact the Cal/OSHA consultation service, which does that.

B. Nakamura asked if everyone there had some sort of infection control plan. G. Hradecky said that they followed the CDC guidelines. They have places to isolate people, and ask them screening questions. C. Comaddo-Nicolas asked what diseases are considered significant respiratory infectious diseases. Is influenza included? John Mehring said there is an intent to include influenza in health care settings. V. Wells said that they take droplet precautions for influenza now.

There was general agreement that there is a need to increase communications requirements, and do more pre-screening and surveillance. V. Wells said that there are some problems with HIPAA, and that medical facilities often don’t know the exceptions.

D. Pascoe said that they have a nurse literally at the back door, which is where people are brought into the jail, and they screen them prior to placing them in holding cells. G. Hradecky said they do the same in San Diego. A. Stottsberry said that at most of their sites, people are screened by the custody staff and then are referred to nursing. They do a routine TB test on the 10th day. They wait until the 10th day because a large number of people are released prior to that. Vicky Wells said while they wait to do testing on non-symptomatic individuals, suspect cases are taken to the hospital immediately for medical evaluation.

J. Mehring asked if anyone does the Quantiferon test (QFT). G. Hradecky said it was too expensive, and virtually required a lab on site. V. Wells said she will check. She thinks the TB clinic at the hospital does QFT, but not the jails. A. Stottsberry said that they follow the recommendations of the National Commission on Correctional Health Care. Some facilities participate in a voluntary program through the Institute for Medical
Quality that was started by the California Medical Association. Some participants indicated that they weren’t aware of this program. [The IMQ can be found at: http://www.imq.org/imqdoc.cfm/5?CFID=783320&CFTOKEN=16062657]

**Engineering controls**

D. Pascoe asked about the requirement in the draft to transport cases or suspect cases to a facility with a negative pressure room within 5 hours. A. Stottsberry said that some smaller county hospitals don’t have negative pressure rooms. V. Wells said that homeless shelters would have problems meeting that deadline. People don’t come to the shelters until the evening, and they usually can’t transport them that night. They can give them a mask, and some can try to isolate them, but there’s no way to transport them that rapidly, and they can’t put them out onto the street. A. Stottsberry said that a hospital’s negative pressure room may be occupied, and even if a room is available in a neighboring county, they may not be able to transport. Mike Gugino said that the Department of Corrections tries to transport within 5 hours. J. Lincoln asked how the CDC’s protocol addresses the risk of infectious TB exposure. How long do they permit? V. Wells said the risk depends a lot on the patient and the conditions of exposure. Janice Prudhomme said there are a lot of factors, and that sometimes people exposed to a highly infectious patient don’t convert. A. Stottsberry said that five hours is a real problem in correctional facilities. It would probably require them to send the patient to the local emergency room. There is potentially liability attached to that. She thinks there should be language about collaboration.

A participant from the Lake County Sheriff said that in the situation last year, where there was an infectious TB case in the jail, they didn’t have negative pressure cells, and they couldn’t find a neighboring jail that would take him, partly due to the nature of his charges. They had a plan from the local health officer that involved borrowing a portable HEPA unit from the hospital. W. Sapeta said that Cal/OSHA had cited them, but asked who should be responsible. A. Stottsberry said it should be left up to the employer to develop engineering controls. V. Wells said that outside of corrections every patient with active TB isn’t in a hospital, they’re often confined at home. Some counties are reluctant to pay for hospitalization. J. Prudhomme said that there is a concern that without specifying a time frame, the window of exposure becomes longer and longer. Title 15 only requires TB screening.

D. Pascoe asked if Cal/OSHA can require facilities to build negative pressure cells, and D. Gold responded that requiring retrofits to buildings is difficult to do within Cal/OSHA rulemaking. D. Pascoe asked if Cal/OSHA can’t require the jails to build negative pressure rooms, can they require medical facilities to take their patients? Contra Costa County has negative pressure cells. J. Mehring asked what the TB control officer’s role is in placing people with active TB. He noted they have broad powers to control TB. He asked how many counties have negative pressure cells. Howard Shumate from Fresno County asked how many inmates were lost in custody prior to negative pressure rooms.
In regards to section (d)(6)(C) of the draft, G. Hradecky said that she thought that requiring ventilation testing every six months was too frequent. They do a daily smoke test when the room is occupied, and do ventilation tests every year. Dave Pascoe said they did annual ventilation tests as well.

**Respiratory Protection**

B. Nakamura asked about respirators, and noted that this process had arisen, in part, from concerns regarding the annual fit-test requirements. G. Hradecky said that she thinks annual fit-testing is too frequent. Deputies may be fit-tested and never use the respirator during the year. B. Nakamura asked about the need to maintain readiness in case of a catastrophic event. G. Hradecky said that she thought it was sufficient to provide an annual fit-test, and to provide an additional fit-test if the employee reports changes in their weight or other factors affecting the fit. She said that employees need to take responsibility to report. D. Gold asked if agencies had bought respirators in response to the homeland security grants. Several people indicated they had. H. Shumate said that they had considered outfitting a SERT for an all-hazard response, but that was not practical. A. Guzman said that they had bought the MSA Millennium, as had the LA Sheriff. Their agreement specified that MSA would provide the first fit-test, but now the question is how to provide the annual.

G. Hradecky said that many more employees have N95 respirators than the full-facepiece respirators. A. Guzman said that their employees use N95’s on a regular basis because they rotate them through the jails. It is a huge financial burden to do a fit-test every year. They have to pull them off the job, and fill-in for them. D. Pascoe said that they have 200 custody deputies out of 850. Some agencies place sworn officers on patrols and non-sworn personnel inside the jails. He said that his department is also providing MSA’s. A. Guzman said that Alameda County is also using the MSA. C. Comaddo-Nicolas said that some people use respirators regularly, while others don’t. A. Guzman said that standardization is a big issue in respirator selection. D. Pascoe said that all officers are fitted with the MSA and the N95 in his department. M. Gugino said that they had fit-tested all 21,000 corrections officers for the MSA Advantage 1000. C. Fisher said that once someone is fitted, it rarely changes. M. Gugino agreed that there is a big bell curve, with most people able to be fit. W. Sapeta said that they do fit-testing using bitrex with a hood. They use the 3M Model 1860. Only two or three people failed – they had longer narrow faces. Using the N95 respirator is pretty self-explanatory. The air purifying respirator [elastomeric facepiece] takes more training to maintain an adequate fit because of the straps. C. Comaddo-Nicolas said that the fire district in Contra Costa is fit-testing the N95s. They also have half-facepiece air purifying respirators and full-facepiece self-contained breathing apparatus. They use the Portacount with the N95 attachment, to fit-test the Moldex filtering facepiece respirators. There is a problem with the attachment, in that it destroys the facepiece so it can’t be reused. D. Pascoe said they do a medical questionnaire annually, and then refit if it’s indicated, for example if there has been weight gain.
D. Gold asked if people think the N95 provides sufficient protection for airborne diseases. Many people responded that they thought it did. V. Wells said that it is probably adequate for TB, but if you’re looking a something different, it may not be. The evidence from Toronto shows that even a fit-tested N95 respirator may not be enough for SARS. W. Sapeta said that in a few years, they will be recommending APR’s or SCBA’s, but it’s expensive. V. Wells said she sees no time advantage in the exception to annual fit-testing for a face-to-face assessment in the draft standard. M. Gugino said you wouldn’t have to take the person away from their station.

A participant asked if the employee can choose the doctor. V. Wells said that an employee can choose a doctor after an exposure incident in the bloodborne pathogens standard. J. Mehring asked what happens if the officer fails a medical evaluation. A. Guzman said that they are not issued a respirator. The department can’t do anything to them, can’t reassign them, because respirator use represents a change in the conditions of employment. He said that of 850 employees, two have failed. One had a triple bypass. J. Mehring asked what the experience had been in the Department of Corrections. M. Gugino said they are trying to make respirator use a condition of employment, which would result in demotion if someone couldn’t qualify. They require that each corrections officer be 100 percent replaceable with any other officer. Right now, nothing happens if they don’t pass the medical evaluation. J. Mehring asked what happens if they pass the medical evaluation but can’t be successfully fit-tested. M. Gugino said that they have the Draeger Defend-Air for people who don’t pass the fit-test. There is a less than one percent failure rate in the whole process (medical evaluation and fit-test). Generally, those are due to claustrophobia. G. Hradecky said that she has been told that everyone in her department has been fit-tested. M. Gugino said that a Florida company does their medical evaluation. They have told them that industry standard is about a one percent failure on the medical evaluation. V. Wells said that some people still can’t be fit-tested.

M. Gugino said that the Draeger is not a PAPR, it is designated as a hood for escape only. He said that he has been told by Cal/OSHA Consultation that if its protective properties are well documented for CN and CS (tear gas) they can use it as a respirator. [NIOSH has approved this respirator for escape only. It therefore can not be used to enter into a hazardous atmosphere – DG and BN] A. Guzman said that you can’t make a condition of employment retroactive, but M. Gugino said that’s what they are trying to do. There was a question regarding the fit-factor required for tight-fitting full-facepiece respirators, such as CBRN respirators, and D. Gold explained the requirements in the standard.

Medical Surveillance

D. Gold explained the medical surveillance section. It is structured around CDC recommendations for health care, some of which do not apply to law enforcement. She asked if departments are currently making flu vaccine available. G Hradecky, A. Guzman, C. Comaddo-Nicolas and M. Gugino said that their departments had some level of vaccination program. J. Mehring noted that about 1/3 of health care workers nationwide are getting vaccinated, and asked if people are taking the vaccine. There was a general negative response. A. Guzman said that before this year it hadn’t been an issue.
This year, people were asking him how they could get the shots. C. Comaddo-Nicolas suggested using language for immunizations such as “make available,” with a description in the exposure control plan. Theresa Fricke asked whether there would be a conflict with HIPAA regarding the documentation requirement (of vaccine declination) in the draft section (g)(4)(E). She noted that it requires the employer to make a record. More guidance is needed regarding confidential medical records.

J. Mehring asked how many screening programs for latent TB infection are voluntary. M. Gugino said the Department of Corrections program is mandatory. A. Stottsberry said that annual evaluation is mandatory for inmates. G. Hradecky said that the initial evaluation is mandatory for employment, and the annual is voluntary for employees. C. Comaddo-Nicolas said that in Contra Costa the initial test is mandatory. Another participant said that in San Bernardino County the initial test is mandatory for inmates, but voluntary for officers. B. Nakamura asked if anyone is moving to Quantiferon, and everyone said no.

A. Stottsberry suggested that the standard direct the employer to communicate with the county TB control officer. J. Prudhomme said that a standard would define the employer’s responsibility, so everyone would be aware of it when contracting with them for medical services.

**Follow up**

B. Nakamura explained that the comments received at this meeting would be reviewed, and integrated as much as possible into the next draft. Comments had also been received at other meetings and by e-mail. There is another outreach meeting being planned for homeless shelters, home health, and emergency medical. After that there will be another full meeting. D. Gold asked if they wanted to have a follow-up separate meeting after that for law enforcement and corrections. Participants agreed that they would like to have a separate meeting.