Cal/OSHA Adult Film Industry Medical Advisory Meeting September 14, 2010, Oakland, California

Chairs: Peter Riley, Deborah Gold

Medical Services Subcommittee Members in Attendance

Aaron Aronow, LAC-USC Medical Center

Denise Bleak, Beyond AIDS, Association of Professionals in Infection Control (APIC)

Gail Bolan, Chief, STD Control Branch, California Department of Public Health

Peter Kerndt, Director of LA County STD Program,

Shilpa Sayana, AIDS Healthcare Foundation

Frank Strona, Chief of STD and HIV Prevention, SFDPH

Centers for Disease Control and Prevention (CDC) (by phone)

Bruce Bernard, Chief Medical Officer Health Hazards Evaluation, NIOSH

John Brooks, Director, Division of HIV and AIDS Prevention, CDC

Marie De Perio, NIOSH

Participants

Kevin Bland, attorney, Free Speech Coalition

Paul Cambria, Attorney

Brian Chase AIDS Healthcare Foundation

Annie Fehrenbacher, AFI Subcommittee, RHIG, UCLA School of Public Health

Mark Kernes AVN

Rob LeVan. Hot House Entertainment

Matt Mason, Treasure Island Media

Mark Roy McGrath, UCLA School of Public Health

Gene Murphy, DOSH

Cristina Rodriguez-Hart, AFI Subcommittee, RHIG, UCLA School of Public Health

Steven Scarborough, Hot House Entertainment

Steve Smith, DOSH

Tuyet Tran, DOSH legal

Karen Tynan, Attorney

Kathryn Woods, DOSH legal

Summary of Key Points

- 1. There was agreement with the comparative risk characterization of different sexual acts in regards to HIV transmission, but the actual per-act risk may be different in this industry than that reported for the general population. There are no similar characterizations regarding the risk of transmission for Hepatitis B (HBV) or Hepatitis C (HCV).
- 2. Employees in the Adult Film Industry (AFI) should be offered vaccinations against HBV and Hepatitis A (HAV). Employees who fit the population characteristics for which Human Papillomavirus (HPV) vaccination is recommended should be offered this vaccine.

- 3. The risk of transmission of HIV, HBV, and HCV transmission through penis to mouth contact without barrier protection is low, but is not quantified. Non-bloodborne STDs may be effectively transmitted through this route.
- 4. The most sensitive laboratory tests for HIV have an "eclipse period" of 5 to 9 days during which a person may be infectious and the infection may not be detected.
- 5. There is a need for more research regarding the disease risk in this industry.

Detailed Minutes

Deborah Gold opened the meeting at 10:00, and said that subcommittee member Naomi Akers (St. James Infirmary) was unable to attend. She said that in addition to the experts on the committee there were some researchers from CDC on the phone. Participants introduced themselves. D Gold asked people to give their names each time they spoke, and explained the importance of creating a record for the Occupational Safety and Health Standards Board. D. Gold briefly explained the history of the project, the California rulemaking process, the role of the Occupational Safety and Health Standards Board (Standards Board) in adopting regulations, and the requirement that California regulations be as effected as federal OSHA.

D. Gold said that the goal of this meeting was to address medical issues raised by the AIDS Healthcare Foundation petition and conditions in this industry. One question is how the risks in this industry can be addressed, and what control measures and medical services can provide equivalent safety to the current requirements, including barrier protection.

Stratification of Risk by Type of Contact

D. Gold asked whether the experts on the committee and on the phone agreed with the relative risk characterization regarding HIV that considers receptive anal sex to be the most hazardous of the typical activities, followed by receptive vaginal sex and insertive anal and vaginal sex as a middle ground. Oral sex is considered less risky. There are also other types of acts, such as skin to skin contact. D. Gold said that it has been traditional in public health HIV prevention outreach to not address oral sex, and to concentrate more on vaginal and anal sex, but there may be disagreement about this in an occupational context.

Aaron Aronow said that with regard to HIV in adult films, there has been testing by AIM Healthcare. Since the published reports of cases in 2004, there has been no transmission of HIV within this population with the testing done every 3-4 weeks. This is not true for some sexually transmitted infections (STI) such as Chlamydia and Gonorrhea, but Syphilis is found to be exceedingly low. There is less data on HCV, but historically it has been very low in other populations, even with HIV, where the viral load is undetectable. But if you have untreated HIV and HCV there is a greater risk that a person will transmit HCV. Normally, HCV is harder to transmit sexually.

Shilpa Sayana said that she agrees with the characterization of relative risk for HIV. She said that testing itself is insufficient, and the AHF believes that barrier protection is

necessary. She added that infection with other sexually transmitted diseases (STDs) increases the risk of acquiring HIV. Looking at the Los Angeles County Department of Public Health (LACDPH) data the STD risk is very high in this population, and creates long term risks, especially for women such as the risk for pelvic inflammatory disease and infertility.

Peter Kerndt said he agrees with the hierarchy of risk as described, but that is for the general population. For this population the activities related to their employment increase the risk at the lower end of the spectrum, such as oral sex. The question is how you can reduce the occupational risk. There are certain activities where the risk is unnecessary and could be eliminated immediately without changing industry practice. For example with "ass to mouth" (ATM), there is no reason not to stop filming to clean surfaces and virtually eliminate the risk of fecal-oral pathogens such as HAV, bacterial infections, amoebiasis and cryptosporidium. D. Gold asked whether ATM is a risk for HBV. P. Kerndt said that it is not. He said that we don't really know the prevalence of HCV infection in this group. They presume the presence of herpes and HPV are high. The oral risk of transmission of these diseases is pretty well established. HCV is probably also elevated. Gail Bolan arrived and introduced herself.

Denise Bleak said she had done a literature review, about the risk of oral sex practices and had provided a summary sheet. One study, by Maura Gillison at Johns Hopkins School of Public Health in Baltimore, looked at 200 healthy controls and 100 people diagnosed with cancers of the tonsils or back of the throat. They found that with 1-5 oral sex partners in their lifetime, there is double the risk of throat cancer compared to those who had never had oral sex, and those with more than 5 partners had 250 % greater risk than those without exposure. There is a stronger link to throat cancers caused by HPV16, one positive marker for tumor. HPV can be a silent infection during the oral contact phase. There are other studies mentioned on the summary sheet as well. This was a retrospective case contact study.

Mark Kernes asked A. Aronow whether he had said that there had been no cases in the adult film industry (AFI) since 2004 and A. Aronow said that was true. M. Kernes asked how he could know that, since not all producers participate in AIM, particularly producers outside of LA, such as in San Diego and Palm Springs. A. Aronow said his information based on the people undergoing regular screening with AIM Healthcare. One to two thousand people go to the AIM sites. It is a limited population, but it is a population on which you can base recommendations about following people medically. With or without barrier protection there needs to be medical monitoring. Condoms and other barrier methods such as oral and rectal dams do not always function properly, particularly as they may not function properly with the kind of use within the industry. AIM is not arguing against barrier methods, but they are saying that there needs to be a standardized regular screening to method to test for bloodborne pathogens within this population.

D. Gold asked him whether there is follow-up for people who were tested one month, and then drop out of the program, or whether his data only cover the people who continue to

participate in the sequential testing. A Aronow said that at this time, they only track people who are participating with the film producers. People have to receive clearance before they perform for the producers in that program. AIM still recommends testing for anyone who performs in adult films whether or not they are in a standard production house. Maybe one thing this group can do is to determine how much screening there should be, how many tests, maybe test more frequently than once per month. He hopes the experts here can come up with a reasonable set of screening procedures which he believes will still be necessary. D. Gold asked him if he knew how many people are vaccinated for HBV? A. Aronow said they offer the vaccine, he did not have information here about the vaccination rate, but he would get it. D. Gold asked if they vaccinate for HPV, and A. Aronow said that they offer it, but the performer must pay for it as well. The difficulty comes in who pays for the vaccinations.

D. Gold asked if they screen for HCV. A. Aronow said that they recommend annual screening, but that their information on HCV is not as powerful because it is done less frequently, and not everyone has an annual test. D. Gold asked if it was correct that people needed a clearance in order to perform for producers who participate in the program, and A. Aronow said that was correct. D. Gold asked what tests are required for clearance to work. A. Aronow said tests for Chlamydia, gonorrhea, syphilis and HIV D. Gold asked if Chlamydia and gonorrhea are tested by urine and whether swabs are required? A. Aronow said that they test urine, and when he came on board about two years ago, they added that all performers had to be tested by oral and rectal swabs every 3-4 weeks, as well as the penile and vaginal tests by urine. There are problems with false positives particularly with Chlamydia where there may be antigenic material that is not infectious. This is less of a problem with gonorrhea. The CDC has generally recommended screening every 6 or 12 months, depending on the population, but has not made recommendations at this time for this population. There is no scientific basis for the specific intervals they use. He distributed a handout containing some statistics on syphilis, Chlamydia and gonorrhea tests at AIM.

P Kerndt asked if they are using nucleic acid amplification test (NAAT) at AIM, and A. Aronow said they did, P. Kerndt said that they know that the test for Chlamydia will remain positive after treatment for 3-4 weeks so there is no need or indication to rescreen prior to that. Testing during the 3-4 week period can create unneeded expense for the performer. If testing is done after an appropriate period, there should not be an issue of false positives. Gonorrhea will remain positive for a week. He said that testing should be exposure based. You need to test after unprotected exposures. A. Aronow said the problem is that the tests (gonorrhea and Chlamydia) are paired and it is difficult to separate the tests. The earliest interval they recommend for follow-up screening is seven days, but many performers demand the test sooner than seven days. So the Chlamydia number is inflated, because testing is done during a period where a person who has been treated will still test positive. He would recommend monthly screening for Chlamydia and bimonthly screening for gonorrhea. It is very difficult to unbundle the tests.

P. Kerndt said they can unbundle the tests by not ordering both tests, and therefore the other test would not be reported. That way there wouldn't be false positives. He said that

LACDPH excludes from their statistics positive results of a test that has been repeated before the appropriate interval. They assume the person has been treated, and therefore LACDPH doesn't include the second positive in the statistics, because they assume it is non-infectious material.

D. Bleak asked if they give medical treatment in the AIM clinic, or whether patients seek treatment other places. A. Aronow said the majority get direct observed treatment at AIM in accordance with standard guidelines, and that AIM also treats the partners. Bruce Bernard said NIOSH has looked at this group before, and there was a report in Dec. 11, 2006 that includes recommendations for a medical surveillance plan including biological monitoring plan for workers engaged in direct sexual contact in accordance with CDC guidelines. So NIOSH has issued guidance for this workforce. It was not specific for testing for Chlamydia and gonorrhea, it just said that screening should be done in accordance with CDC guidelines. P. Kerndt asked if this is the report that was in response to the LA County request. B. Bernard said yes, that the recommendations are in the published health hazard evaluation (HHE). P. Kerndt said he had it and could provide it to the committee.

John Brooks said that he agrees with the risk stratification for HIV. He said that there is a recent meta-analysis in Lancet, which can provide current numbers, but the important thing is the stratification based on the type of act. There are other factors that can alter risk within any stratum. For example, STD co-infections increase the risk of acquiring HIV for an HIV negative person. Evolving and convincing data show that a man's circumcision status may alter his risk; there is almost twice the risk of acquiring HIV for an uncircumcised man during insertive vaginal sex. They don't have data for insertive unprotected anal sex but there's no reason to assume it's any different. Also, in this industry the duration of contact for performers is probably different than for persons not in the industry. The risk calculations are based on having sex during the course of people's personal lives, not during employment.

- J. Brooks said that there are also considerations regarding viral load, since the principal concern is protecting the health of the HIV negative person. There are cases where a person was infectious during the early period of infection, when the viral load is very high. The viral load is high during seroconversion and the person is more infectious than in other times in the disease course. We should consider identifying people in that critical phase. Also, campylobacter and shigella should be added to the list of organisms transmitted by anilingus (oral-anal contact). HBV can be transmitted through oral-anal contact, although it is not as infectious as HAV. Lastly, there is the increased risk of cancer due to HPV, especially the oncogenic types HPV16 and 18. There is a vaccine for HPV, and he asked if the industry is integrating this vaccine into their program. He said that they support any effort to map out the prevalence and route of infection and would assist state efforts.
- D. Gold asked whether the relative risk stratification for HIV by types of sexual acts holds for HBV. J. Brooks said he is not aware of similar literature regarding the risk of transmission for diseases other than HIV. G. Bolan said that HBV is more infectious in

general than HIV, but the studies regarding the risk of transmission have not been done. They would be unethical because there is an effective vaccine. It was easy to document per act transmission efficiency for HIV and herpes because there are a lot of discordant couples. There are natural history studies of Chlamydia and gonorrhea, but often there is not just one act. The partner of someone infected with Chlamydia or gonorrhea is infected about 60% of time, but it's not just from one act. It is best to focus now on prevention. D. Gold asked if there were studies regarding sexual risk for HBV transmission from before the vaccine became available in the 1980s. A. Aronow said some studies of New York bloodbanks in the 1970's and 1980's looked specifically at HBV prior to 1981 and those were the studies that also were looked at for HIV prior to 1981.

- J. Brooks said he was familiar with those studies, and they were instrumental in understanding HIV, but he didn't recall if they stratified by sexual act. A. Aronow said he thought they did, but he would have to check. He said he was part of looking at that data at Memorial Sloan- Kettering. They had the NY blood bank population in their treatment program. At that point they only had AZT available.
- G. Bolan asked whether it was the Peter Boyle article in Lancet, and J. Brooks said it was. He said it lays out issues around other factors such as mucosal integrity. G. Bolan said that she had that article. G. Bolan said there is limited data on the transmission efficiency by different sexual activity for other STDs. The San Diego STD clinic looked at prevalence of Chlamydia and gonorrhea in oral, rectal, and vaginal sites in women. There have already been a lot of studies on gay men looking at oral, rectal and urethral infections and prevalence. We know that the infections are occurring. Unfortunately the CDC treatment guidelines for women only focus on the cervix. For example, the CDC only recommends screening for Chlamydia for women less than 25 years old [http://www.cdc.gov/STD/treatment/2010/STD-Treatment-2010-RR5912.pdf]. That's a population based recommendation. The other CDC screening recommendations are annual screening for gay men, and if there are higher risk behaviors such as multiple partners or methamphetamine use increase the screening to every 3 months. The new CDC guidelines will have a new section on correctional populations. Unfortunately CDC screening recommendations are buried in their treatment guidelines, and are limited to those populations that they have data from. They aren't really screening guidelines. With health care reform people will be getting preventive services based on these recommendations. The problem is we don't really have screening recommendations for this population. She agrees that that we need a quality surveillance system so that we can have good rational recommendations for screening. Many are doing testing or screening but there is a lack of an evidence based set of screening procedures. P. Kerndt said he agrees there is a need for better data, and we need surveillance within a medical monitoring plan for a workplace, in this industry, because it is different than general population-based recommendations.
- S. Sayana asked whether data from people entering other clinics with STDs, or seeking treatment at night after contact, are included in the statistics? How do the statistics capture those cases? P. Kerndt said that in California, the health care providers are

supposed to report occupation, but that is often not done. LACDPH reminds clinics that routinely provide screening, and have tried to monitor the reports. At AIM they differentiate between those who work in the industry by a designation civilian or talent. There are other sites that also routinely provide screening. Unless the provider gets the information about occupation it is not done. The surveillance now underestimates morbidity, and they are not really sure how much screening gets done, or by anatomical site. There is probably more screening for the heterosexual part of the industry than the gay industry, and there is no good denominator data.

Frank Strona said it is important to distinguish between the heterosexual/bi and the MSM [men who have sex with men]/gay industries. You need to make sure that data really represents both types. It is probably an underestimate because some performers use private medical providers who may not be set up to provide surveillance data, although the performers may be having routine tests. The men's industry may not have the same type of talent pool. Some may work for one producer, or may not work more than a couple of times a year. Some use AIM or St. James, some use other clinics or medical services. This will not account for their other sex with partners outside the industry. He realizes that people working in the heterosexual industry also have sex outside the industry, but there is more of a system in the heterosexual industry, and it lends itself more to surveillance. There will not be a good system that works for all performers gay, straight, or bi. There are differences in testing technology. There's only one access point in northern California – there is one AIM site in northern California, in Oakland. The San Francisco site is now closed. AIM uses a commercial turnaround laboratory that can give results in 24 hours to four days. In areas where people rely on local clinics, such as Magnet or St. James, or public health clinics, the turnaround time for tests is at least seven days. The group may have to create separate recommendations for each industry. It's uncomfortable to generalize from a data set that may not include this part of the industry.

D. Gold asked about the experience in San Francisco. F. Strona said his experience is that routinely, performers come in for a shoot and leave town and are not in the area for long. They may go to a clinic to get testing done at the urging of producers, who have been working with SFDPH. Because the performers are not local, it is difficult to access testing, and they are accessing limited tools. They do look at the AIM model, although the Oakland site is difficult for some to access. A lot of the male studios use condoms for all intercourse. There are new underground studios all the time, and that's going to be an issue. But five to seven of the established northern California studios have adopted a condom for intercourse standard and promote that. In three studios condoms are optional on set but the culture of the male industry is that HIV positive performers can perform. There is a difference in the way the gay and straight industries deal with HIV infection. In the straight industry, they say if you have it, don't perform. But in the gay industry you may have it, but you can perform. In regards to other STDs, SFDPH recommends testing every 3-6 months for syphilis, gonorrhea and Chlamydia if you're at higher risk. They do NAAT and take swabs. The challenge is access to resources and turnaround time. They can provide them with on-line sites, but those sites charge. The clinics cannot do it in less than 5-7 days. If they come on site and get tested and leave, how do they follow-up and

treat them? St. James has limited funding and also uses the public health lab. They find there are less straight studios in northern California, and those have relationships with AIM, but the struggle continues to be turnaround time, access and cost, including who's bearing the cost. Who will reimburse for costs – what about people working for multiple studios?

Medical Services and Screening

D. Gold said there are two types of medical services. One is pre-testing like the AIM model to limit risk to others. The other is medical services to address risks to the employee that arise in a population that has sex as an occupation. We can look at them like asbestos workers, where medical services are used to detect signs of disease at an early stage. Asbestos workers are protected by various control measures that reduce risk, and then because some risk remains, medical services are required. If a proposal were to go forward, and barrier protection is used for everything what would be the recommendations for medical surveillance. She asked F. Strona if when he said they used condoms for intercourse, he excluded oral sex, and F. Strona said that was true, they don't use condoms for oral sex. D. Gold continued that, another question is if you were to depart from using barrier protection for certain acts, for example, if you do not use condoms for oral sex, how should that be handled in terms of reducing risk at the shoot, and how would that change the medical surveillance?

A. Aronow said that for many reasons you need to have medical surveillance even if condoms are used on sets. There is an increase in barebacking films and this needs to be considered. People have sex outside of the industry. Particularly gay and bisexual men have a higher rate of having sex outside of the industry. He supports making a recommendation that they could pair positives regardless of sexual preference or activity, as long as viral loads are undetectable within the previous month. Although this recommendation is controversial, it is similar to the Swiss hypothesis. This is the best they can do in terms of this population for HIV positive people who have sex in this industry. He is trying to make recommendations for all people in the industry, not just heterosexuals. The Swiss hypothesis is that if you have couples that are HIV undetectable by the latest version of RNA PCR testing, and it is not detectable, there is no significant risk of transmission of HIV or discordant strains of HIV. D. Gold asked if this is the practice sometimes called sero-sorting.

J. Brooks said that this arises from an issue about how you can counsel anybody who has HIV that is well-controlled and is in a committed relationship. The Swiss statement, and the German AIDS treatment organizations have issued a similar statement, is in regards to committed heterosexual couples in which the HIV infected partner or partners have been undetectable for HIV for more than 6 months, and who do not have any STDs. Their statement did not include homosexual men or women or people with diagnosed STDs. This is not something that is recommended in the US. There are two things being discussed. One is risk reduction for the HIV/STD negative person who wants to stay that way, and to ameliorate any potential risk. The second is harm reduction, which recognizes that there is inherent risk in what is happening, and attempts to make interim

decisions for the gray area, such as trying to deal with sero-sorting among homosexual men, which is an area that his division within CDC is currently discussing.

- S. Sayana said that at a recent HIV conference, there was one well documented case of super infection among two HIV positive men who had sex without barrier protection. Both had undetectable viral loads. One individual had a "viral rebound," about three months after having sex. Researchers found that the individual had acquired a different virus. Studies found that the newly acquired strain had come from the other person and had the same resistance and mutation patterns. This shows how important it is to include barrier protection in this discussion.
- G. Bolan said there have been studies looking at the viral load in genital secretions compared to the viral load in the blood. You may have a non-detectable viral load in the blood, and still have detectable virus in the genital secretions. Just because you can't find HIV in the blood, doesn't mean it isn't concentrated in genital secretions. J Brooks said he agrees, the Swiss recommendations are extraordinarily controversial, and that's why there are many presentations at conferences discussing the risk. There are case examples of people who met the criteria established by the Swiss, and who transmitted an STD or HIV superinfection.
- A. Aronow said that there are isolated cases. He agrees there are various compartments in the body that may be discordant with the plasma such as CSF [cerebral spinal fluid] and genital, but in general these cases are rare. That does not mean not they do not say barrier protection should be recommended, but they try to do their best to institute guidelines that would reduce the risk of spreading HIV in couples that knowingly engage in sexual activity that is high risk for transmission if their viral loads are undetectable in their plasma. D. Gold asked if he was saying this only in terms of the conditions of the Swiss recommendation, which wouldn't apply in this industry. A. Aronow said that he recommends taking the Swiss recommendation further. The recommendations would not be for sero-discordant couples but would be for HIV positive couples who test undetectable and who sign a waiver, understanding that there is a minimal risk. This would reflect the reality of what is going on in the world.

Steven Scarborough said that while there is a lot of private sero-sorting going on in the community, he finds it difficult from a business practices point of view. It would make the producers need to know the HIV status of the performers, and that's something that they have resisted at all levels. He is coming from one model, the condom mandatory model. He understands there is another model, but they have always treated performers as though they could be positive, and that comes from the gay culture. It should be emphasized that there are two very different business models. In the Los Angeles straight industry there is testing. In the long-established San Francisco gay model, there is mandatory condom use and no testing. Culturally gay men have a conversation about HIV and STDs that he's certain doesn't happen in the straight community. It comes out of their culture and is part of their strategy to survive the AIDS epidemic. There have been testing procedures that are recommended for sexually active men. Many men are already being tested within the community, borne out of their culture. There is a lot of

difference between these two different models. He is not saying that the other model is not as safe, but that there are two distinct models. It may also be unlawful for him to know the HIV status of the performer, and it may also be unlawful for him to not hire someone with HIV. HIV positive people deserve to have their dignity and their right to perform. They know there are HIV positive performers in the industries but he doesn't know who they are or how many.

- D. Bleak said that a study of people diagnosed with gonorrhea she has some statistics, one from gonorrhea surveillance data provided by the CDPH STD branch from January 1 to December 31 2008 [http://www.cdph.ca.gov/data/statistics/Documents/STD-Data-CGSS-Regional-Data.pdf]. The data include 744 females knew, but 25% did not know, men 78.4% knew HIV status, 90% of homosexual men knew their HIV status during that year.
- F. Strona said that while there is a cultural conversation we shouldn't ignore outliers. Maybe about ten percent of performers are people coming from more rural areas, or areas where the conversation is less mature, they may be younger men, and they may walk into a performing situation. Not every gay man has the ability to have the conversation, but it is more likely in San Francisco.
- J. Brooks said that the discussion seems to be moving towards whether there should be different recommendations for performers who are HIV positive and those who are HIV negative. He said that like F. Strona, he would like to believe that most gay men who are sexually engaged are disclosing their status, particularly if they are in an accepting environment. But unfortunately, recent research suggests that is not the case. There is a recent study by Ken Mayer at the Fenway Clinic, a gay and lesbian clinic, among HIV positive MSM with an STD. This study found that less than 50 percent reported disclosing their HIV status to their sexual partners. In a study he was involved in regarding HIV outpatient treatment in 8 cities, 54% of MSM who had unprotected anal sex did not disclose their HIV status. It may be easier to disclose your HIV status in the context of performing, but the studies show that disclosure is not as frequent as we would like.
- F. Strona said that he was aware of the studies about the community as the whole. We don't have enough data available. Nationally, enough conversations are not happening. G. Bolan said that there is anecdotal data in California from follow-up on syphilis. Individuals who are coinfected with HIV and syphilis tell public health personnel that they sero-sort, and that all their partners are positive, so they don't need to talk with them about HIV, they can just test the partners for syphilis. But when they contact those partners, they have found partners who have acute HIV, partners who didn't know their status, and partners who thought they were negative. There is a perception that they are sero-sorting, but when they actually go out and talk to the partners, those partners are not HIV positive. She said that while there is currently more access and screening among the gay community, providers are not always up on the current recommendations. A recent study found that in HIV care practices, only about 70% of gay men are screened for

STDs on an annual basis, and that's not counting the ones who should be screened more frequently due to higher risk.

P. Kerndt noted that this discussion demonstrates the need for a medical monitoring program in this industry that will protect them. Then we will have the denominator data. We will know how many are infected, how many are working, what the rates of disease are, what anatomical sites are screened, what's the rate of disease there, whether condoms were used or not used. We would then over time be able to look at those risks. Another question is who should hold that information. Should an employer ever have access to that type of personal health information? There are other models, such as having the information held by someone chosen by the individual, such as their personal physician, or if they don't have one, a physician the company chooses. That physician could provide a clearance to return to work after someone tested positive for a treatable disease. What is the responsibility of the worker, and what is the responsibility of the employer? It may currently take seven days to get a test, but if the industry is big enough they may be able to get a 24-hour turnaround.

Christina Rodriguez-Hart said that there has been a lot of discussion about the differences between the gay and heterosexual industries. There may be organizational and logistic differences, but the risks are very similar for the performers. For example unprotected anal sex poses the same risks for women and men, and the ways to protect employees, such as screening and barrier protection, are similar. We should talk about what applies to both. The lines between the industries are blurry. Plenty of male performers work in both industries using different stage names. They may not want to talk about it because of the stigma for straight men working in the gay industry, but it happens. Barebacking is very popular now in the gay industry. In the past, maybe, most gay production was condoms only, but now, barebacking is common, even predominant. D. Gold asked if she had data about the predominance of barebacking in the gay industry. C. Rodriguez-Hart said that she would provide it.

- S. Scarborough disagreed that it is predominant, but said that it is growing. The audience has spoken and it is not true that condoms have no financial impact. There is an economic disadvantage to using condoms. The use of the term barebacking reflects a stigma for the gay industry. The heterosexual industry makes movies without condoms, while in the gay industry it's called "bareback," which is a very stigmatizing term. The industries are very different, and there are different solutions to find. The condom mandatory model for the north and the testing model for the south are different. The gay side should not be further stigmatized. Also, you may find an HIV positive performer working on the gay side, but you won't find anyone who is known to be HIV positive working on the straight side. They would be so stigmatized, they would not work. On the gay side, they may make an accommodation for the performer to work using condoms, but not on the straight side.
- F. Strona said that when he talks about the male studios in northern California, he is referring to the ones that have a significant business model. In the 25 years he has been researching this industry, he's seen that the new technology has created huge growth in new studios, including fly-by-night start-ups. Anyone can shoot a video, edit it, and

produce a DVD. These shouldn't be lumped with established studios. Some don't even have business licenses. A lot of the less than reputable practices are happening in these start-up venues that can easily close down and start up elsewhere. The more established studios decided a while ago to be as legal as possible, but the new ones don't necessarily do that. That may account for some of the increase in what's called barebacking. He agrees with S. Scarborough that it is stigmatizing to use that term for the gay industry. It's hard to address all segments of the industry with a balanced message.

D. Gold explained that the purpose of this meeting is to address medical issues, rather than to have a general discussion of control measures and the organization of the industry. She said that the meetings were being held in the north and the south because Cal/OSHA recognizes that the industries differ in many ways.

Medical Services Recommendations If Barrier Protection Used for All BBP Exposures

D. Gold then moved the discussion to item 4 of the agenda. She asked what additional medical services would be recommended if the industry complied totally with the bloodborne pathogens standard – that is if condoms and barrier protection were used to prevent all contacts with mucous membranes, including oral sex and rimming. The bloodborne pathogens standard requires the employer to prevent contact of the employee's eyes, nose mouth and skin with vaginal secretions or semen. If this were followed, what other recommendations would the committee make regarding medical services in this industry, beyond the existing requirements for HBV vaccine and follow-up for exposure incidents? What would be the recommendations for sexual health screening? What about vaccine for human papillomavirus (HPV)? In the BBP standard you can't make pre-screening serology a requirement for the HBV vaccine, but the employer can offer it. What about prescreening for HPV vaccine?

Vaccinations

A. Aronow said he would make recommendations rather than mandates. He would recommend prescreening for HPV and HBV to eliminate additional cost and unnecessary vaccination for those already infected. People with chronic HBV infection should be offered treatment as would be done in standard medical practice. The recommendations should be the same whether or not you are working in adult film, based on the high frequency of sexual partners and high frequency of behaviors that increase the risk of all STDs. We can't be unrealistic about barriers, or people would be having sex in a spacesuit in order to protect every surface of the body. D. Gold asked him for his recommendations. He said he would recommend prescreening and vaccination as you would for the general population. She asked about hepatitis A (HAV) vaccine, and he said he recommends appropriate vaccinations and treatment when available, based on results of test.

G. Bolan said if people were fully protected, then we wouldn't need any medical monitoring, but we know that people are not going to be fully protected with PPE. Also even in health care settings, we still have recommendations. You need to offer vaccines and encourage them as must as possible, particularly for hepatitis A and B. The question

of HPV vaccine is complicated. The vaccine was mainly studied in large cohorts of young women. There are some current studies in gay men. There's no information about the vaccine efficacy with the HIV infected population. Vaccinations generally seem like a good idea but we don't have any clear data on HIV-infected individuals. If we offer HPV vaccine, it's because of a good concept but it's not because the medical community in general at this time has broadly recommended it either in older people or in men. In regard to serology for HPV there is no good test for HPV infection. People may have a positive antibody and no sign of infection, and people with a negative antibody may have HPV by DNA. No one is recommending screening for HPV, because we don't have the serologic tests like we do for HBV, HAV and HIV. There's HPV DNA screening but it depends on where you sample, and there are a lot of questions.

P. Kerndt said he agrees about recommending HBV and HAV vaccine. In terms of prescreening for HBV, he recommends screening because of the type of contact, and because the relatively small number of people who are antigen positive can be infectious it to other people, which is different than the health care setting. HBV can be spread orally, or otherwise. In terms of HPV he agrees that screening is of no value. The screening is type-specific, and there may be cross protection between the oncogenic strains, but we don't know that yet. Screening would also be cost-prohibitive. Vaccination would also protect against venereal warts. Catch up vaccine is recommended for people up to age 26. This worker population, at least in the heterosexual industry in the south, is very young, often just over 18 or in their early 20s, so the recommendation would fit. He said that he would recommend HPV vaccination for both women and men in this industry.

A. Aronow asked whether P. Kerndt would vaccinate someone who had active condyloma. P. Kerndt said that he would not. A. Aronow said he agreed. He wouldn't make a clear recommendation about HPV vaccination He said that Amber D'Souza at Johns Hopkins is looking at the male population in terms of HPV, and we don't have good data yet for the efficacy of the vaccine in this population. G. Bolan said that Joel Palefsky at UCSF is also looking at that issue. The CDC still recommends HPV vaccine even if the person happens to know they have some HPV DNA or if they have warts. Warts are not a major risk for cancer, so they recommend to go ahead and vaccinate.

- J. Brooks said that the Advisory Committee on Immunization Practice [ACIP] recommends that women aged 9-26 should be vaccinated against HPV, regardless of their known or unknown HPV status. There are no current recommendations for men, although there is a lot of work looking at the value of immunization for boys and young adult men, heterosexual or homosexual, with or without HIV. The current screening tests for HPV are not sensitive or specific enough, so it is not useful.
- G. Bolan said that she had thought that at a recent ACIP meeting there had been a recommendation for vaccinating young boys. J. Brooks said that the recommendation is still pending. G. Bolan said that many providers are looking at vaccinating young boys. J. Brooks said that there is no recommendation against vaccinating any particular group, such as HIV positive men who are willing to pay for it out of pocket, because there is no

evidence of harm, but it's not recommended. P. Kerndt said that most of the worker population we're dealing with should be HIV negative.

- A. Aronow asked if there was a consensus here regarding vaccination. He said that there was more evidence supporting simply vaccinating the population, whether or not they have condyloma. G. Bolan said that in terms of HBV in this population you do want to screen in order to pick up people with active infection. The CDC recommendation when screening for HBV in high risk populations is to administer the first vaccine dose at the same time as screening, and then discontinue of the person turns out to have evidence of current or prior infection. She would not recommend screening for HAV or HPV.
- J. Brooks said that there is a need for surveillance among the people in this industry for HPV. In response to a question from G. Bolan, he said that CDC may be able to provide lab support. He said that the NHANES [National Health and Nutrition Examination Survey] study is screening for all 35 types of HPV. He said that they know that among sexually active adults the prevalence is so high after a certain age that at least in modeling exercises, the benefit begins to wane. But it's hard to generalize from the general population to this specific population.
- C. Rodriguez-Hart asked about HPV vaccination in the AFI, given that the population has a high number of sexual contacts, and the HPV vaccine generally wasn't recommended for people who had already had a large number of sexual contacts. There are some people just coming into the industry who haven't had a lot of sexual contacts, but a majority of the people have a large number of sexual partners. So is that a consideration in recommending the vaccination? G. Bolan said that there are studies on this issue, including one at UC Berkeley that found that if a person had more than 4 sexual contacts, they probably have already gotten HPV, but it doesn't address how many different strains. The CDC recommends vaccinating women in this age group without looking at the number of sexual partners. The vaccine costs \$300, which is much more expensive than the other vaccines. Who is paying is an issue. P. Kerndt said it's important to think about what it prevents, which include cervical cancer, and maybe oral-pharyngeal and rectal cancers. This is a huge savings. Also, over time, many people may have received this as part of their regular adolescent health care. We shouldn't miss this opportunity. G. Bolan said that she agreed that it is beneficial, but we wouldn't want to make a medical recommendation to a population that doesn't have the resources to implement it. D. Gold said that if Cal/OSHA adopts it, it would be a requirement for the employer to provide it.
- S. Scarborough said that the circumstances being addressed under item #4, we are assuming that contacts have been prevented, so why would you need to use any other preventive measures? D. Gold said that there is residual risk, including the risk when condoms break and barriers slip. In health care you have to use safety needles, and gloves, and sometimes eye protection or gowns. But still, the standard requires that employees be provided with HBV vaccine and if there's an exposure incident, post exposure prophylaxis. Even though the health care worker is suited up, we still require medical services for them. Similarly, with asbestos workers, they wear respirators and tyvek suits, and they have to shower out, etc. but we still have medical surveillance for

asbestos workers. We will talk later about if we don't use condoms for oral sex, or other circumstances, but the point of this discussion is to establish a baseline and medical recommendations for that, and then how the recommendations would change if we changed the risk.

- S. Sayana said that she agreed with what others have said. She likes the analogy to health care settings. If you get stuck by a needle, the risk is really less than the kind of risk we are discussing. She supports requiring screening and vaccinating for HAV and HBV, and vaccinating for HPV in the recommended population, women up to age 26. She agrees that screening may not be cost-effective. Vaccinating both men and women may be more cost-effective given the long-term cancer risks.
- D. Gold asked whether there was a difference, in terms of the recommendations, between the two HPV vaccines, one of which includes two strains, and the other of which includes four. G. Bolan said you get more if there are four different types covered. P. Kerndt said 6 and 11 cause 90 percent of the warts, and 16 and 18 cause 70 percent of the cancers. J. Brooks said that both vaccines contain 16 and 18, and P. Kerndt and G. Bolan agreed. G. Bolan said that the history of other vaccines shows that in the future more types can be added. There are over 100 types of HPV. P. Kerndt asked what happens if someone already has a type of HPV, and then gets vaccinated. G. Bolan said there is no harm. P. Kerndt asked whether the vaccine would boost that person's immunity. Some people believe there may be cross-reactivity. He said that the vaccine is believed to be safe, and there is at this time no downside to vaccination.
- G. Bolan said she is convinced that HAV and HBV vaccine should be provided. In this scenario, where people are protected, we aren't recommending screening for gonorrhea or Chlamydia, because people are protected. The risk of transmission is incredibly low, and testing could be very costly under those circumstances. She said she was concerned about the cost regarding HPV vaccine. Employers would spend a lot of money if it is required if we go outside the general recommendations. We could use the current criteria for vaccination of young women rather than broadbased HPV vaccination. We don't know if this is a very sexually active population and they may already be immune.
- S. Sayana said that this supports the need for medical surveillance. G. Bolan said that maybe the CDC could help study this before making a broader recommendation. P Kerndt said we should look at the risk in the workplace before looking at the cost, and what level of protection is required in the workplace.
- D. Gold said that there appears to be some question about whether to recommend broad HPV vaccination, but asked whether they would recommend HPV vaccine in the context of post-exposure follow-up, such as condom breakage. J. Brooks said there is no evidence on the use of HPV vaccine in a post-exposure context reduces the incidence of HPV.
- F. Strona asked whether vaccinations would be offered or would they be mandated, so that if you wanted to perform you would have to show evidence of vaccination. If so, if you were vaccinated 10 years ago, how would the performer go back and research that?

D. Gold responded that Cal/OSHA has taken the position in other settings, such as in regards to flu vaccine, that we cannot mandate employees be vaccinated. Legislation could mandate vaccine, and individual employers may have policies. In Cal/OSHA the employer is required to offer medical services to employees, but employees, with the exception of the respirator medical evaluation, are not required to participate. The employer has to pay for the services.

A. Aronow said that to summarize this discussion, we're clear on HAV and HBV regarding vaccinations. The only question is whether it's cost-effective to prescreen for HAV or simply give the vaccine as highly recommended. Regarding HPV, we're still mixed, and are not ready to make a recommendation on vaccination, other than what is currently recommended to vaccinate women up to 26. But we are not sure about broader vaccination. D. Gold said this is if everyone is using protection. We will revisit these issues when we get to the other scenarios.

P. Kerndt said that we should adopt the current ACIP recommendation which includes catch-up vaccination up to age 26 for women. If there's a male recommendation it should be adopted. He strongly believes male performers should also be vaccinated to protect themselves, and in the mostly condom industry, for the potential benefit against rectal cancers. In terms of pre-screening there should be HBV antigen screening at the first vaccination. If they are antigen negative and have core antibody, they wouldn't require the other two doses. D. Gold asked whether he thought the BBP standard should be amended to not permit the employer to require serology prior to providing HBV vaccine. P. Kerndt said no, it's a different risk for HCWs who are not necessarily having sex with other HCWs. In this industry, employees are having sex with each other, and it's important that performers know if they are positive, because if there's an exposure incident, it's more likely that their partner will contract HBV. G. Bolan said that as an infectious disease doctor, she struggles with the issue that we don't want to identify people who are infected with hepatitis B. Screening is not recommended in low-risk populations, but it is recommended in higher prevalence populations. The Cal/OSHA standard doesn't reflect CDC recommendations for screening in higher prevalence populations. D. Gold explained that the Cal/OSHA standard is different because it's an occupational standard. Also, the standard doesn't say you can't do screening, it says you can't make participation in screening a pre-condition for getting vaccinated. G. Bolan said that this is a different situation because it's important to know about hepatitis surface antigen. J. Brooks asked what the Cal/OSHA requirement is regarding HBV screening in a post-exposure situation. D. Gold responded that in post-exposure it's whatever the current CDC guideline is. J. Brooks said that the CDC recommends screening for HBV in a post-exposure situation. The difference in this industry as compared to health care is that there are a lot of exposures taking place in this industry. D. Gold said that we would be talking about those scenarios later. P. Kerndt said that it might be adequate if there is an exposure incident to do serology at that time, and if the person is infectious with HBV, they could provide immunoglobulin and vaccination to the exposed worker if they weren't vaccinated. D. Gold said that would be currently be considered part of PEP.

[There was a lunch break from noon to 1 p.m.]

Medical Surveillance and Screening

D. Gold asked, in the context of item 4 on the agenda, which assumes complete barrier protection against bloodborne pathogens, would there be any for medical surveillance or periodic screening. She said that the current standard does not require periodic screening unless there has been an exposure incident. She noted that the committee had considered the question of screening for HBV, and agreed that it was appropriate in a post-exposure context, consistent with CDC recommendations. She asked whether the committee would recommend screening for any of the STDs, for example Chlamydia, gonnorhea and HIV. if barriers are used all the time. S. Sayana asked in this scenario, if they are using condoms for every act. D. Gold said yes, but the barriers may not be 100 percent successful, and that creates a residual risk. The question is whether the residual occupational risk is significant enough to require additional screening.

D. Blake said if there are effective barriers used at all times, screening is not needed except as part of PEP [post-exposure prophylaxis]. A. Aronow disagreed because condoms may break and also, barriers are not always used. It is better to look at the highest risk and least common denominator. The reality is barriers are not used, at least for oral sex. D Gold explained that the premise of this part of the discussion is that barriers would be used for all sexual contact, including oral sex, as currently required by the BBP standard. P Kerndt agreed that screening should be done even under these conditions. He said the screening AIM pioneered has been tremendously beneficial. Based on 8 years of monitoring data, this group has high disease rates. He recommends on-going screening for STDs even with full barrier protection. D. Blake said the issue is whether you could prove that complete barriers were used. In health care there is no post-exposure screening after an exposure when barriers are used. When PPE is used, that ends the evaluation for an exposure to diseases such as TB. There is a need to define what you mean by baseline, and what you mean by full PPE in this situation.

D. Gold said the question is whether there is enough related occupational risk in this scenario to justify additional screening requirements. P. Kerndt said that his position is that there is. Annie Fehrenbacher asked who would pay for the surveillance. D. Gold said that if it is a requirement in the standard, the employer pays for it. The requirement would need to be justified on the basis of occupational risk. A. Fehrenbacher asked whether this applies to independent contractors. D. Gold said that Cal/OSHA has no jurisdiction over independent contractors, if they are truly independent contractors.

A. Aronow said he doesn't like mandates and he doesn't think the state really wants to spend the kind of money it will take to monitor whether or not a mandate or requirement takes place. He would rather use recommendations than a mandate in this situation, he would use the term "highly recommended." G. Bolan asked to clarify between recommendations and the standard. D. Gold said that when the board adopts a regulation, it's a requirement. If Cal/OSHA finds an employer is not following the regulation, then we issue citations. G. Bolan asked whether that means that in terms of the vaccinations discussed earlier, that would mean that the employer had to offer the vaccine, but would

the employee have to get them? D. Gold said that the employer must offer them, but it is not required that the employee take the vaccine.

G. Bolan said that in general screening recommendations, they don't take condom use into consideration. If someone, for example, reports that they have receptive anal sex and always use a condom, they still recommend screening. That's when patients come in and self-report condom use. Self-reporting is often not accurate. But in an occupational setting, where you are really requiring condom use, and ensuring that they are used correctly, you are protecting yourself against gonorrhea, Chlamydia and HIV, and you're also protecting yourself against herpes, HPV and syphilis if it's where the condom is, but if it's outside the condom, there's potential transmission. So it's a different situation than with the public. In the general population, you still screen people who report condom use, and you will pick up some STDs. If you want to be super cautious and spend lots of money you can reduce the risk by requiring both condoms and screening, but what's the risk-benefit? There is no good data on STD prevalence in the gay side of the industry.

D. Gold then asked about the post-exposure context. She asked whether, if there is an exposure incident such as condom breakage or a failure to use a barrier would you include STDs in the post-exposure evaluation? G. Bolan said that there are no specific guidelines for this industry. The closest thing to recommendations for post-exposure to STDs are the recommendations for rape situations, in which is recommended that they test and treat for bacterial STDs, and consider HIV prophylaxis. John Brooks said that the CDC post-exposure recommendations are laid out specifically in terms of certain scenarios. But the principle of PEP is that you provide the appropriate screening and preemptive therapy based on the risk. The current STD and HIV guidelines don't address sex workers. D. Gold said that currently the standard requires that PEP be provided in accordance with the CDC guideline, but the guideline generally referenced deals with occupational port-exposure, and doesn't deal with sexually transmitted diseases. It mostly addresses HIV, HBV and to some extent HCV. J. Brooks said that in addition, the CDC STD and HIV guidelines don't address performers in this industry. G. Bolan added that for condom breakage, the guidelines address HIV, but don't address all STDs. J. Brooks said that the principle is that after an at-risk exposure, you consider appropriate testing and treatment.

P. Kerndt said the closest comparison is the requirements for brothels in Nevada. These require screening after exposure, as well as regular screening and the use of condoms for all exposures. C. Rodriguez-Hart said that the Nevada brothels do weekly screening for Chlamydia and gonorrhea, monthly screening for HIV, and require the use of condoms for anal, oral and vaginal sex. P. Kerndt asked what they do if there's an exposure. C. Rodriguez-Hart said she did not know. It was all self-reported that they used condoms. D. Gold asked whether Nevada's screening includes swabs of sites for gonorrhea and Chlamydia, or whether it was done by urine. J. Brooks said he looked on internet about Nevada, and found that there was a notice of public hearing on August 13 of this year on the topic of test protocols. They are considering very specific language about which test, etc. He said that it is an amendment to Chapter 441A. P. Kerndt said it may be about the MSM brothel. D. Gold suggested that one possibility is to have a reference in the post-exposure section of the BBP standard to a CDC or CDPH guidelines on sexual contact.

S. Scarborough said that in his experience of 20 years of shooting, it is very rare to have a condom break. You don't issue someone a condom at the beginning of a day, and they go until it wears out. They change condoms every 10 minutes as well as after a take. It's difficult for a performer to stay erect with the condom on. They masturbate, and then they put on another condom. They go through dozens of condoms each day. C. Rodriguez-Hart found a reference that in Nevada brothels, they change condoms frequently. They found a brothel worker used an average of 6 condoms per day.

Mark McGraff asked how regular screening would affect post-exposure follow-up. It would seem that the post exposure incidents would be less extreme if you were doing regular screening. D. Gold said that in the conditions being discussed now, there has been no recommendation as yet for regular screening, because barrier protection would be used for all contact.

Medical Services if Barrier Protection Not Used for All Oral Sex

D. Gold explained that instance b on the agenda, describes a situation that is more common in the gay industry but also exists in the heterosexual industry, where condoms are used for anal or vaginal sex, but not for oral sex. If there was permission in the standard to use that kind of control measure, how would you change the medical recommendations, and would those changes provide equivalent protection to the requiring barrier protection? Although the previous scenario, in which barriers were used for everything is not common, this scenario is common in the gay industry, where there is a lot of condom use in anal sex, but less in oral sex. So how would that work, what is needed for vaccination, screening, and post exposure evaluation? For example we had discussed in terms of HPV vaccination, that if barriers were used for all contacts, then there might not be justification for a general recommendation for HPV vaccine. Would that change if there is no barrier required for oral sex, with or without ejaculation into the mouth, or would that be relevant for HPV vaccination.

D. Blake said the literature says to screen for Chlamydia and Gonorrhea. There is less about HAV and HBV or other diseases. All say to screen for HIV after exposure. There's no screening for herpes except no sexual activity with an open sore. There is preventative literature that talks about oral mucosa lacerations and problems with repeated sexual intercourse. Also, we need to identify what constitutes an appropriate barrier, for example some have used saran wrap or rubber dams. P. Kerndt said that we know from the literature that the risk for acquiring an STD from oral sex is not trivial for a number of pathogens, so if you go without condoms, there absolutely has to be prescreening that is consistent with the incubation periods of the diseases. On the other hand, a condom for oral sex would be very effective at reducing those risks.

D. Gold asked whether the risk of HIV transmission in unprotected oral sex, which is considered to be lower risk both in the published literature, in the community's mind, and in public health messages, is unacceptable. D. Blake said that in "precum" which is the substance that is present before ejaculation, HIV is not measurable, but has been implicated in some cases where HIV was transmitted. P. Kerndt said there are two good

meta-analyses on the subject. There is some risk of HIV transmission that depends on host factors, and if there is screening, the exposure will likely occur during an acute infection. The risk will be affected by the viral load in semen and cervical secretions, which would be at their highest levels.

A. Aronow said he has a problem with writing language that results in a mandate and fine. He would prefer things being highly recommended. D. Gold explained that Cal/OSHA can only require that the testing be provided, and Cal/OSHA cannot require employees to participate. If you want to require employees to be tested before they can work, it would probably take legislation. A. Aronow said that type of legislation is not a good idea. The problem is that the fines would not be effective, and the guidelines used by the AIM that exist now, are effective. Does Cal/OSHA want to police condom use? D. Gold responded that the purpose of this meeting is to discuss the medical and scientific information. The current standard requires condom use and barrier protection for all acts, and we are required to enforce it under the Labor Code and federal OSHA mandates. We are trying to figure out whether there is a way to change the BBP standard to make it more realistic and effective in covering adult films.

- J. Brooks asked under the current standard, if a producer was making films doing only oral sex, would it be reasonable to have a recommendation to have condoms available. D. Gold replied that it would only meet the requirements of the regulation if we changed the whole standard, because protection is currently required to prevent contact of the eyes, mouth, and other mucous membranes with semen and vaginal secretions. The purpose of this meeting is to determine whether we can say that there is another system of controls that would be as effective? So, again, the question currently being considered is, if the BBP standard were amended and it said that in the AFI, similar to what the petitioner put forward, condoms or other barriers would be used during vaginal and anal sex, but there would be no requirement to use barrier protection for oral sex. If that were true, what screening recommendations would apply? Would it be prescreening which might have other legal issues, or ongoing or periodic screening, and how would you apply that to the different STDs? Also, what pathogens would they be screened for? If you're screening for HIV and only doing it monthly, you're outside the window for PEP. What about if you've vaccinated everyone for HBV, does that remove the risk of HBV transmission, and how to you know everyone was vaccinated? Also people have said that the risk of sexual transmission of HCV is less, but how much less is the risk?
- P. Kerndt said that the literature through 1998 found there are 16 reports of HIV transmission with ejaculation. Without ejaculation, data from a cohort study found possible transmission between two lesbian women. There are also reports of transmission of hepatitis A, B, and C. D. There are another 35 reports of transmission of other diseases. D. Gold clarified that STDs are divided into two groups. The first group is those diseases considered bloodborne such as HIV, HBV, HCV and possibly syphilis. They are coverd by the BBP standard, while the other STDs are not. She explained that the mandate for Cal/OSHA to be at least as effective as federal OSHA makes it more difficult to change requirements relating to BBP than for pathogens not considered to be bloodborne. The question is does a risk of HIV transmission exist for unprotected oral

sex? F. Strona said that some risk does exist, and how you define it as low or moderate depends upon the environment. Part of the challenge is that the risk varies in industry depending on the type of film, whether there are multiple sex partners, or other factors. Part of the problems with this scenario where condoms are used for intercourse but not necessarily for oral, the question is how do you make testing available in a meaningful timeframe? You can't test that day or that week. In that case, the recommendation may be to test post exposure. There may be other issues that need to be covered, like what to do with a new or infrequent actor. How do you make testing accessible for the producer and talent since there is not an AIM in every area, and there may not be a community infrastructure or private care to provide the required services. The onus goes on the company regarding how to create that system. There are also documentation issues. Routine testing might make sense for a performer who is doing several films in a week, but will not make sense for someone who makes one film and then may not make another one for a year.

D. Blake said in the last couple of meetings we have discussed people working for multiple employers or intermittently. We discussed that they could have a system like they do for intermittent workers in health care which includes registering of employees, vaccination cards, and training, since intermittent workers may not have the same training level needed to work safely. P. Kerndt asked whether the regulatory process would establish, including what is required, when it is required and by whom? For example, there are lots of laboratories that can be contracted by employers once the regulation is established. D. Gold responded that while we should not ignore the issue of feasibility, we want to focus at this meeting on the medical information. So what we need to know is what you would do for an intermittent worker. If you know for sure that someone who was performing had no disease, you don't have to worry about using a condom. But any testing is subject to a lag time. Attempts are made to narrow the window period, but we have no way to say that at the moment that one person has sexual contact with another person's mouth, that either of them are not infectious. Given that there is a low but existing level of risk, can we separate that risk based on whether or not there is ejaculation in the mouth. Can we say that it's okay to not use condoms, but not if you ejaculate in the mouth. Should we separate out those two issues? If you don't ejaculate in the mouth, what is the risk, what do we need to know, what can we do with medical services to address the curable STDs, or should we just say there is no equivalent to requiring barrier protection, and we should close out this process and move on.

S. Sayana said that a barrier should be encouraged and offered. There should be some sort of screening at an appropriate interval to capture the STDs and see where infections are occurring, especially because this population can be transmitting to each other. There should be some form of screening. A. Aronow said he has the AIM statistics, which is weighted for heterosexual films, but includes gay males, mostly using condoms. The reality is if they have unprotected oral sex, without ejaculation and you do not see HIV (none in five years). There is not much information on syphilis because you don't see much of it. The question really comes down to Chlamydia and gonorrhea. Having said that he still questions the value of regulations as compared to recommendations.

Kevin Bland said that in terms of the discussion of feasibility, we should treat this like the Cal/OSHA process for permissible exposure limits (PELs). The first step is to create health based recommendations for a perfect world. And then those results would go to the whole group to consider feasibility. D. Gold said that we also need to address federal equivalence. K. Bland said we also have to be able to explain why we're deviating, like in terms of the oral sex issue. He said he hears that there is "a risk," but not what that risk actually is. What is the increase in risk, and is it enough to be an occupational hazard?

- D. Gold said that both the CDPH and CDC have put out number for per act HIV risk in the general population, but she is hesitant to use those numbers because they may not be relevant in this context. For examples, the CDPH has quantified the risk of HIV transmission from receptive anal sex with a known positive partner as being between 1 and 3 percent. But the reports
- [http://www.lapublichealth.org/std/docs/art_rotblatt_haf.pdf] on the 2004 outbreak showed a much higher rate of transmission. The CDPH says the risk of HIV transmission with receptive oral sex is extremely small but infections do occur following this activity. CDPH further states that there is a 0.09 percent per contact risk of transmission from contact of mucous membranes with whole blood, but there is no estimate for other fluids. [http://www.cdph.ca.gov/programs/aids/Documents/RPT2004OfferingPEPFollowingNonOccupExp2004-06.pdf] She asked if anyone had better numbers on the risks of oral sex.
- J. Brooks said that while you want to quantify risk mathematically they don't know the risk in this context. They know it is likely to be no less than the risk for the general population, and is likely to be higher due to frequency and duration of exposure. The 2004 study found a transmission rate of about 23 percent -- 3 of 11 performers sero-converted under these unique circumstances that enhanced the risk of transmission. The question boils down to this: if you consider the consequence, the consequence is very bad. The level of risk is low, but what is tolerable under Cal/OSHA rules? Do we have methods in place that are sufficient to effectively screen and keep that risk as low as possible? The two major screening methods are laboratory-based and behavioral. Laboratory tests are good, but not infallible, and we don't know their limits in this population. The other screening method is behavioral, where you stratify people by factors such as the number of partners and the frequency of sexual contact. In this context that's a moot point. What is the CDC stance on oral sex? The risk is very low, but the only way to absolutely protect yourself is to not engage in the behavior or to use methods such as barrier protection at every potential exposure.
- P. Kerndt said that in 2004 the patient was antibody negative and viral load positive. The viral load was extremely high, and the attack rate was high. J. Brooks agreed that during sero-conversion the risk is higher, and although the overall risk is lower for oral as compared to anal, the risk is higher during that period. He said he didn't know if during the event in 2004 there was anyone who's only exposure was oral sex, and P. Kerndt and G. Bolan responded that no one in that group had only been exposed through oral sex.
- P. Kerndt said the difference in rates of transmission may be due to acutely infected people compared to people with chronic infections. He asked about how you would

protect people during oral sex against herpes and HPVs if there is no barrier. D. Gold responded that herpes and HPV are not considered bloodborne pathogens. She said that the named pathogens are HIV, HBV and HCV, but the standard also includes any other disease that can be transmitted through the blood. She asked about studies showing that syphilis may be transmitted by blood, although that is not the main way it is transmitted. J. Brooks said that syphilis can be transmitted through blood, but that's not the major route of transmission.

- G. Bolan said that blood products are treated, and there is no issue of transmission of syphilis through blood products. In fact there is no need to screen the blood supply for syphilis. At a CDC meeting it was decided to continue to test the blood supply for syphilis, in order to provide an incentive to develop better test methods. In terms of other diseases, you're mainly dealing with infectious agents that are in high concentration in bodily fluids. Chlamydia and gonorrhea are in tissues such as the cervix and the urethra. They're not coming out as much in the ejaculate. The problem is that there are no answers to these questions. The risk may depend on a variety of factors, relating to the individual and the type of act. The reality is there is much lower risk of transmission of all STDs with oral sex without a condom, but the risk is not zero. We can all use our own adjectives to describe the risk. P. Kerndt said that there is a substantial risk, I feel like the risk is pretty low. Maybe we should try to collect some data in terms of oral sex through medical monitoring before making huge regulatory recommendations. We should try to determine whether there is enough disease to recommend routine screening.
- P. Kerndt said they have been doing screening for about 8 years. In the last four years, they found 3200 cases of Chlamydia and gonorrhea. The exposures were not just oral sex. D. Gold said that it's important to differentiate between the bloodborne diseases and other STDs. She asked about oral transmission of HCV. G. Bolan said that she has seen studies on HCV in terms of vaginal and anal transmission, but not oral transmission. With HBV, the issue has been less predominant because of vaccination. So HIV remains the predominant BBP transmission issue. If you feel you can control the HIV risk without barrier protection for oral sex, then the question becomes whether you can control the risk of these other STDs. If you can't control the risk of these other diseases without barrier protection, then we need to say that to the Standards Board. Right now the industry is not overwhelming compliant with this standard, and we would like it to be more compliant with the standard, at least in terms of protecting against higher risks. We'd like to get some of the risk down, while protecting employees and being at least as effective as federal OSHA.
- D. Gold asked if it is true that there is very little information about what the residual risk of HIV transmission is during oral sex, with or without ejaculation. G. Bolan said we know that there is greater risk with ejaculation, because there is more virus in ejaculate. J. Brooks said that it is fair to say risk of oral sex without ejaculation is low, but how low can not be quantified yet. He asked about the risk of cunnilingus [contact of the mouth with the vagina]. D. Gold that most of the articles don't talk about it. P Kerndt there is a case documented in Annals of Internal Medicine in 1989. D. Gold said that there were questions about other factors in that case, such as exposure to blood, and P. Kerndt

- agreed. G. Bolan said the HIV cases of women who have sex with women are among women who identify as lesbian but who have been having sex with men. There are very few HIV cases among women who are only having sex with women. J. Brooks agreed and said that the sparse literature on this topic shows that the risk is extraordinarily low among women who have sex with women. The cases that have been documented always involve extenuating circumstances such as exposure during their menstrual period or dental work. There is an alternative explanation for what happened.
- P. Kerndt asked if in discussing oral sex without condoms are we presuming that there would be a prohibition of anal to oral, which increases the risk? D. Gold said that would be discussed later. He said we would also want to restrict contact during menstruation. J. Brooks said that we know that HIV is present in cervical and vaginal fluid, and can be recovered and can be infectious. He said that the correlation between viral load in these fluids and viral load in the blood is not precise. He said that a paper that was published this month reported that a few people in whom the virus is suppressed in the blood may shed the virus in genital secretions. But the risk is very low, but it is difficult to quantify.
- A. Aronow said in AIM's experience, involving 72 thousand tests of just under 2000 people over a 5year period, who are active in the industry, working more than one time per month, and who screen at least monthly, no cases of HIV transmission have been found since 2004. These performers generally have oral sex without ejaculation into the mucosa. Syphilis is so low that it is not considered a major risk, and neither is HIV in those that screen at least every four weeks, if they are working regularly. He understands that scientifically, they are not within the window period for HIV. If you screened every two weeks on a regular basis for those who work more than once per month, we will catch the cases prior to people becoming infected in most if not all of the cases. The testing methods are rigorous enough to catch people before the point that they are highly infective. He does not have absolute proof of this, it is based on statistics regarding infectivity, possibilities within a month period of time from high risk behavior, and the time it takes to mount a high enough viral load. D. Gold asked whether he was saying that the tests are sensitive enough to detect HIV before there is that bloom of virus. He said, yes, if the test is done every two weeks you will virtually catch everybody.
- J. Brooks said that the two week period would catch virtually everyone, but won't catch everyone. A. Aronow agreed that you wouldn't catch everybody, but it's the best you can realistically do. J. Brooks said that with the best available technology, you still have a 5-9 day period of time when the person can be infected and can transmit that infection and when the virus can be detected. The likelihood of that happening is small because the period of time is only a few days. The risk of transmission during that period is much greater than at other times during HIV infection, because the viral load is ramping up very quickly. It is very rare but it happens, and that is what happened in 2004. P. Kerndt said that in 2004 it was also the sexual content, in that it was double anal sex. In adult film, a lot of the sexual activity is extreme, which increases the risk of transmission. If you have an STD on top of that, including a chronic viral one like herpes, it also increases the risk of transmission.

- J. Brooks said that the committee should consider whether there are other occupations where the risk of the exposure to the bad thing is very low, but the consequences of the exposure are life threatening. Bruce Bernard said that one example is the discussion of risk in the OSHA Benzene regulation. D. Gold said that the analogy to carcinogens is limited because the risk from carcinogens is assumed to be a chronic exposure, and exposures to carcinogens are regulated based on the risk during a working lifetime. Here we are dealing with a rare but catastrophic single event. J. Brooks said you can make an analogy to being an astronaut. The rocket is made as safe as you can possibly make it, but then they do rarely blow up. What's the acceptable risk? At least astronauts are very aware of the situation they are getting into. He said he is trying to think of a situation where something is really unlikely, but when it happens it is really bad news.
- D. Gold asked how unlikely transmission is in this situation. When there is a period during which there is a big increase in viral load and during that period people are engaging in anal sex, that's one level of risk. What is the level of risk for oral sex without ejaculation during that period? Is that risk substantially lower than the risk for anal sex during that period? Can we say that there's a low risk that someone will be in that 5-9 day period, but obviously it can happen because it occurred. If you put that risk together with a lower risk that a certain activity will transmit, such as oral sex, how does it compare to a higher risk activity such as anal sex? So can we pull out those activities because the risk of the activity is lower, and testing also lowers the risk, can we do that for example for oral sex, but maybe it doesn't adequately control the risk for anal sex? The best the committee may be able to do is to say, these are best numbers that we have, and is this a good enough way to control it.
- J. Brooks said he is not aware of any HIV transmission by oral sex that has occurred during the period between infection and detection of infection. He hasn't seen any specific case report for that, but there may be one somewhere. He clarified that the "window period" is the time it takes for a person to develop antibodies to virus, which can be weeks. The term "eclipse period" refers to the time between when a person is infected and when the virus can be detected, which is about 5-9 days. We know from the general population that infection can occur during the eclipse period, either from blood transfusions or unusual circumstances where people were tested very frequently. They are rare events, but the person can be very infectious. The eclipse period is a portion of the window period, about 5-9 days after infection. When he said that he was not aware of any infections by oral sex during the period between infection and detection of infection, he was referring to the eclipse period.
- P. Kerndt said that it is hard to determine whether an infection can be attributed to oral sex during the eclipse period. You can't isolate behaviors. In 2004 the attack rate of 24 percent for HIV was well documented for double anal. It is hard to sort these cases out because there are other factors. J. Brooks said that in 2004, a person got a supersensitive test seven days after infection that was negative. P. Kerndt said that in this situation, we assumed that the act that transmitted infection was the anal sex, but we don't know. J. Brooks said that what differentiated the three women who became infected was that they were the ones who engaged in double anal, but the box cover featured oral, vaginal and

- anal sex. P. Kerndt said that there are other studies, including 35 case reports of various diseases transmitted through oral sex that are reasonably well-documented. What risk can we live with? What is cost-effective? What does it mean to do no harm? Do no harm to the worker? Or do no harm to the employer, in terms of their costs in paying for medical monitoring or protection?
- G. Bolan said that this discussion has focused on the straight industry, where people cannot work if they are HIV positive. You are selecting out people who potentially can be transmitting HIV. The screening program biases the data because if people don't have HIV, there's no HIV to transmit. So it's not surprising you haven't seen HIV transmission. In gay porn there is talent that is positive, they have been having oral sex without condoms for years, but you have not data on whether or not there is oral transmission.
- P. Kerndt said it is complicated, and the presumption is that if they got infected they got it somewhere else and not in that environment. F. Strona said that there hasn't been an attempt to gather this data for a lot of reasons. Some people who work in this industry don't work full time, and may not identify as a performer. Some people may come into the business already positive. There are a lot of access points for care for gay performers and they may choose a number of ways to identify when they come in to a clinic. They may also be getting care through a primary care provider.
- P. Kerndt said that whatever the standard does in terms of requiring condoms, it needs to require screening and documentation of condom use or non-use so that a reasonable determination can be made regarding if there is an infection, whether exposure occurred in the workplace. C. Rodriguez-Hart said that you need to consider that performers have a large number of sexual partners in a short period of time, so if they are infected with HIV they can pass it on quickly, before the next test comes up. For example, in 2004 within 23 days the index patient had 61 primary and secondary sexual contacts, just in the industry. Two of the three women who were infected had participated in double anal, but not the other woman.
- S. Scarborough said that there is too much focus on 2004. He said that people's awareness and testing has changed since then. He said that he thought the question is OPIM for oral sex. Experts have said that the risk of oral sex is low or very low. But P.Kerndt keeps coming back to double anal, and that doesn't apply in this scenario. Referring to the slides

[http://www.dir.ca.gov/dosh/DoshReg/comments/STD%20and%20HIV%20Disease%20and%20Health%20Risks%20Los%20Angeles%20County%20DPH.pdf] presented by Robert Kim-Farley (LA County Department of Public Health) at the previous meeting, he said that the slides stated that the risk of HIV from oral sex is low.

D. Gold asked about other STD risks associated with oral sex, meaning penile/oral contact. What is the risk of non-BBP infections such as gonorrhea and Chlamydia? G. Bolan said that the CDC treatment guidelines do not recommend testing for pharyngeal Chlamydia. The CDC does not think it's an important site of infection, or it is

- transient. J. Brooks agreed, and said that the throat is an important site for gonorrhea and G. Bolan agreed. In terms of the CDC screening recommendations for the general population, it's not recommended to screen for Chlamydia in the throat. D. Gold asked whether there is a reason to be more concerned about the throat in this population. A. Aronow said probably not. J. Brooks said that he thought that screening for Chlamydia in the throat was not recommended because the infection there was considered minor. G. Bolan said that some experts think the lymphatics clear the Chlamydia from the throat. But in 1987 she was told similar things about gonorrhea in the throat, while at City Clinic, she was looking at gram stains from the throat that looked like they had come from the urethra. Given the amount of oral sex adolescents have today, if you want to protect the cervix and the reproductive health of women, she would be worried about Chlamydia in the throat. J. Brooks said he agreed.
- P. Kerndt said that the initial period of infection in throat for Chlamydia and gonorrhea is often asymptomatic and the incubation for gonorrhea is 4-7 days, so if you're screening once a month, considering the number of partners and shoots, it can easily transmitted between tests in the workplace. G. Bolan said that she was just trying to let people know about the current CDC screening recommendations about pharyngeal Chlamydia, because we may have to justify it if we are going to deviate from them. CDC isn't worried about Chlamydia in the throat. The challenge is that with the nucleic acid amplification tests (NAAT) you get always get results for both Chlamydia and gonorrhea. So now we're now getting more information about Chlamydia in the throat, and we are treating those cases when they are identified. There hasn't been enough information yet for the CDC to change its recommendations.
- P. Kerndt said that one thing we know is that with repeated screening in a population you can eventually bring the rate of disease down. The difference in this population is that at least some of these workers are being screened at least monthly when they are working. Repeated screening in a high risk population has a beneficial effect in reducing the rate of infection, because they are treated. But if they do not screen the rectum and the throat and the person is asymptomatic, there will be a reservoir for repeat infection. You're just passing the infection back and forth, if it persists. We have to think about screening particularly if there will be oral sex without a condom.
- D. Blake asked A. Aronow about the efficacy of the testing program. How much of a decrease have they seen? A Aronow said that there has been a decrease by about one-half over the past 5 years. He has compared the rates of infection between the people tested at AIM but not in the industry, which is six percent of their patient population, and the people in the industry, which is the other 94 percent. The prevalence of gonorrhea in the performer population from January 2005 to present is 1.6 percent, while the prevalence in the non-performer population is 3.2 percent. For Chlamydia, the prevalence in performers is 2.5 percent as compared to 3.2 percent in the non-performers. They have not examined the data for symptoms nor for site of positivity on a case by case basis. It may be that the prevalence of symptoms may drive the non-performer population to come in for a test. That would be true for any STI clinic.

- P. Kerndt said that they have also examined AIM's data. Their testing shows that 20-25% get re-infected within a year. They don't know how many of the people who weren't re-infected aren't working. The LACDPH estimate is a minimum estimate among those that they know to be working. There are thousands of infections among a relatively small number of workers. This industry has a small number of people getting infected over and over again. They have also tried to model the rate of infection based on an estimate of the size of the active population at around 2-3 thousand. The rates of infection in this population are many times higher than what they would expect to see in a similar age LA population. For example, the rate in the general population for Chlamydia is about 2000 infections per 100,000 population. The rate among performers is 21,000 per 100,000 population, assuming 2000 active people. The risk is significant and on-going.
- G. Bolan said a 20 percent annual re-infection rate for Chlamydia is not that unusual. A study of adolescent girls in Baltimore found the same re-infection rate. In Kaiser in California, the reinfection rate for Chlamydia in young women is six percent, which isn't that different. We need to separate out each different organism in the data, at least between gonorrhea, Chlamydia and syphilis. P. Kerndt said he could provide a chart. A. Aronow said that the exact numbers for performers are in his handout. For industry performers, there were 1182 cases of gonorrhea, over 5 years out of 71,765 tests in the population of about 2000 individuals. For Chlamydia, it's 1797 out of 71,823 total tests. He prefers to compare the performers in AIM to the other population tested at AIM. D. Gold asked whether he knew what the risk behaviors were for the non-performers tested at AIM, and he said that they did not, but that they were trying to quantify it. D Gold said that if people are having non-occupational risks that are equivalent to an occupational risk, we would still want to control the occupational risk. We're concerned about the elevated occupational risk to people in the industry, whether or not you can find another high risk group to compare them to.
- A. Aronow said that they are trying to look at a comparable population. They are finding that the people who walk into their offices and are not performers have a slightly higher prevalence. D. Gold asked if he was saying there isn't an occupational risk. He said that the closest population to the performer population, in terms of risk behaviors and number of contacts, aside from sex workers who don't use barrier protection, would be the gay male population who engage in high risk behaviors with high frequency. He agrees that the risk is higher than what they want. D. Gold asked if there is an occupational risk that needs to be controlled? A. Aronow said that there is. D. Gold asked, given that one way to control the risk, at least a portion of the risk, is through barrier protection are there other ways to control the risk if you were not to use barriers for oral sex without ejaculation?
- S. Sayana asked A. Aronow if the [non-performer] patients who came in were mostly symptomatic? A. Aronow said that many patients come in regularly because they have high frequency sexual behavior similar to performers in the AFI, and are not symptomatic. He is in the process of looking data regarding patients who are symptomatic, and at positive test sites, so he isn't prepared to discuss that now. What he can say if that if they tested more frequently, such as every two weeks, they would

capture more infections earlier on, and be able to treat the patients and their partners sooner. When asked if he meant testing all orifices, he said he did, but there are different test methods for specific areas. The records indicate that they are characteristically currently testing oral-pharyngeal and anal area now by swab, and testing male penile and female vaginal by urine, with intermittent vaginal swabs. He doesn't know the percentage of vaginal swabs versus only urine.

- K. Bland said that it appears that there is a consensus that there is minimal risk for non-condom oral sex, and that there are ways to lessen the risk through testing. He said there doesn't seem to be a consensus that there's a need to require testing through regulation. He said he also did not think the group had reached a consensus on whether there is an acceptable level of risk, or whether the standard should be zero risk.
- D. Gold said that there seems to be a belief that of the activities that we could discuss penis to mouth contact without ejaculation is low, or even very low, for transmission of HIV, although there is no specific number. There is less data on HBV and HCV risk per act. Generally, in terms of bloodborne pathogens, the risk of oral sex without ejaculation into the mouth, is considered to be among the lowest risk. There might be some way by dealing with a window period for HIV testing to further reduce that risk, but there are no numbers for that. If barrier protection is not used for these acts, then what are the risks? She said that she thought the group had said that if you were using barrier protection for all acts, we wouldn't necessarily recommend that the employer should have to offer HPV vaccine. What about penile/oral sex without a condom? Under that scenario there is some risk of transmission between the penis and the throat. Would you then recommend HPV vaccine consistent with CDC recommendation to vaccinate women 26 and under? She said that it was her understanding that the CDC is likely to broaden that recommendation to include some age group of boys or men. J. Brooks said that the recommendation will not be based on the risk of oral transmission. She asked if this is the point at which you would trigger a recommendation for HPV vaccination.
- P. Kerndt said that condoms don't protect completely against HPV transmission, and on that basis alone we should include a recommendation for HPV vaccination as part of the regulation. G. Bolan said that when we were discussing the complete protection case, we were still recommending HAV and HBV vaccination, and HPV vaccination according to the CDC recommendations. If we're doing that for the most protected situation, the recommendation should carry down to all other situations, and the committee members agreed. G. Bolan said we're pretty clear about the post-exposure situation. Where we are struggling is in the screening. P. Kerndt said what if the condom comes off in the mouth, and G. Bolan said that we aren't talking about using condoms for oral sex in this situation. We're looking for a low-risk strategy.
- D. Gold said that it would be helpful is for the experts to think about a screening protocol that would enhance safety in a situation in which there were no ejaculation in the mouth for oral sex, to control the risk for HIV, HBV, and HCV, assuming that HBV vaccination is offered but not required. Also, what screening would they recommend for non-

bloodborne STDs. She said that she would send out an e-mail with this and other questions.

K. Bland said he wants to add whether there is an argument to be made that no screening should be required for oral sex without a condom. It sounds like on this issue you could win an argument regarding whether it would be as effective as the federal regulation. G. Bolan said that we need to ask what the goal is of screening. Is the goal to identify prevalent infection in the population and get people treated, or is it to identify incident or new cases. This gets into the issue of high viral load in terms of HIV infection. Also, you need to determine whether the testing can be done in a timely manner and get the result back in time to take action so that you can actually reduce risk. Testing alone isn't necessarily going to achieve those goals. She said she views medical monitoring differently than screening. She considers medical monitoring to be appropriate for a situation where we don't really know what the problems are, and don't have the data to say that there is a problem here, so we don't necessarily recommend screening programs. Screening is usually recommended for a situation where you know there is a problem and you want to screen people to see if there's infection. One approach is to set up a medical monitoring pilot program so you can collect the data, so that we don't sit here a year from now still giving opinions in a data vacuum. She said maybe that would be called "surveillance."

D. Gold said it would be very helpful if the public health agencies and clinics were to set up this kind of surveillance program. In Cal/OSHA, the term medical monitoring is used to refer to a program of medical services provided to the individual employees, and aimed at controlling residual risk where the other protections leave off. This can include testing, such as testing for blood lead levels, medical removal, vaccinations or appropriate treatment. In this context the term screening is not meant in a population sense but in the individual sense. Also, there are two contexts for screening – one is "prescreening" which is used to reduce the risk of unprotected or protected acts to the other person, and the other is screening done because the employee is at risk, so we want to detect infection early in order to treat the employee being tested. The one that Cal/OSHA is most comfortable with historically is the second, where employees at risk of a given disease are screened in order to find infections earlier and provide treatment.

- D. Gold suggested that the remaining meeting time be spent on deciding how to continue this discussion. Dealing with the oral sex question provides an approach for dealing with other risks, although the risks are not the same. For example, while oral sex may be considered to be a minimal risk for HIV, whereas in our earlier discussion no one thought that anal sex was low risk.
- P. Kerndt asked what you should do if you know through screening that someone has a chronic STI? If someone has HIV, is the standard going to allow oral sex without a condom? What about herpes, which is chronic and there is viral shedding without symptoms? What about fecal oral contact, will we allow that without a condom? Some disease transmission in that situation is easily prevented you need to stop and clean between acts. Could you have oral sex without barrier protection during menstruation?

Currently, they use a tampon or sponge, clean up and proceed. This is prolonged, extreme oral sex, what are you going to do?

D. Gold said that the question remains, what is the level of risk. We are trying to collect information and articles, and in the end we still may be unable to quantify certain risks. The issue of whether someone with HIV can work is dealt with very differently in the voluntary testing program in southern California, as compared to much of the gay industry. There are many other legal issues. J. Brooks said he believed they are protected under the ADA. D. Gold said there are also laws in California that specifically protect people's HIV status.

F. Strona said that the issue of HIV status is also complicated by whether performers are contractors or employees. D. Gold responded that if a performer is an employee, they come under Cal/OSHA standards, and if they aren't, the standards don't apply. But, she said, Cal/OSHA has consulted with the Division of Labor Standards Enforcement and other authorities, and it seems that pretty much the performers are employees, although there may be some exceptions. D. Gold said that S. Scarborough had stated one position, which is that employers don't have a right to know, and don't want to know, the HIV status of their employees. Other producers take the perspective that they are going to wait and get a clearance from AIM before they let someone work.

A. Aronow said AIM doesn't give clearance in the legal sense, they give results. Those results are signed off by the individual adult performer with regard to confidentiality, notification, and the availability of those results to the individual production for which they will be performing. D. Gold asked whether a statement made at a previous meeting was correct that AIM puts the names of performers who have acceptable test results in a database producers can access. A. Aronow said that was true, but that access is limited. D. Gold asked whether the access was limited to an individual performer or whether it was limited to people who have access to the whole database. A. Aronow said that they are attempting to be more specific to individuals, but individuals know that their names or identifiers will be in a data base to which producers for whom they will be performing will have access. The performers sign appropriate consent that complies with HIPAA and other regulations regarding confidentiality. P. Kerndt asked whether the producers and directors had access to the performers' test results, and A. Aronow said that they did. P. Kerndt said that participation in this program means that either you work or don't work, so even though the performer signs a consent, it's coercive. K. Bland said that this isn't a topic for this committee.

D. Gold said that a medical surveillance model that utilizes pre-screening as a condition of whether you work, whether it is through an AIM database or any other mechanism, is one approach to medical services. The other concept is to provide medical services not for the purpose of determining whether a person is infectious at the time of a shoot, but to provide early treatment for the employee, or other appropriate intervention. P. Kerndt said that a third concept is that the employee would have a physician who would look at the results, and would provide the employer with the information that the employee is cleared to work. D. Gold said that is really a pre-screening program. P. Kerndt said that

would protect the employer against having the information, and would protect the employee's privacy. D. Blake said if a person had a condition and needed to work, they could be cleared to work with PPE. This is done in health care, where people may be required to use certain protective equipment if they don't get treatment for a certain illness. For example, if an employee has been exposed to a patient who may have pertussis, and, during the period when they are waiting to see whether the patient has the disease, the employee refuses to take an antibiotic, then the hospital requires them to use PPE all the time they are working, so they can't give it to anyone else.

D. Gold summarized that a pre-screening medical services program, might be accomplished by the employer receiving a statement from a health care provider similar to the Cal/OSHA respirator medical evaluation. The statement would say either that the person can work with no restrictions, the person can work but there are certain restrictions, or the person can't work. This isn't to say that this sort of system would meet Cal/OSHA or other legal standards. Another concept is to offer medical services to people in this industry to reduce the residual risk, by providing appropriate vaccines, and by offering periodic screening that would enable early detection of some infections and early treatment of some infections. A medical services program in the standard may incorporate one or both approaches.

Karen Tynan said workers in the industry typically know that the other performers on the set have been tested within 28 days, and that provides a level of comfort. So if you remove that mechanism you need to think about how that's going to work. The exchange of information currently is a peer to peer relationship. It's not an employee to employer to employee exchange of information. D. Gold said she is not sure how the peer exchange of information would fit into the standard. K. Tynan said that it's important to be mindful of how a shift from one system to another can affect the feasibility.

D. Gold suggested that the group communicate by email about some of these issues to share articles and data. She said that Cal/OSHA would soon send around a list of questions to everyone on the e-mail list. The next scheduled meeting is on October 25th and that meeting will discuss broader issues, like control measures or whether medical recommendations should be voluntary. The October meeting should pull together some of the discussion in this meeting and the previous subcommittee meeting as well as the previous full meeting, and we can assess where we are at. Cal/OSHA's leadership will also want to see where things stand, and make a decision about whether to continue the advisory meetings or consider a rulemaking proposal.

K. Bland asked if there will be follow up on the proposals from the control measures subcommittee. D. Gold said there would be at the October meeting. She said the October meeting will follow-up on this discussion and the control measures subcommittee discussion, and then assess where we are going in this process. Are there changes that should be made to the bloodborne pathogens standard, or is the standard okay as it is? Also, at some point the Standards Board will want a report on this project.

C. Rodriguez-Hart said that whatever model of medical services we go with, the standard should allow for the worker to choose a physician for medical screening. It shouldn't be a model that restricts where the performer goes to a certain facility. There shouldn't be a monopoly. It should be something any physician can do. D. Gold said the physician would need to be knowledgeable about STDs. S. Scarborough said that in terms of costs, you need to bulk the testing. Maybe instead of one agency it could be several. But if you don't do something to reduce the costs, they can become unimaginable. D. Gold responded that it is typical in Cal/OSHA regulations not to just have complete employee choice of physicians. On the other hand, the medical provider must provide services in a confidential manner and meet the requirements of the standard. It's something we should discuss. K. Bland said if we do create something there should be a set of qualifications for the entity providing the medical services, similar to crane operator certification. That way it doesn't monopolize it but it creates a set of criteria.

D. Gold agreed asked if there were any other comments. The meeting ended at 3:20.