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AIDS UPDATE

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- Regulation
- Mortality and morbidity trends
- Underwriting techniques and methodology
- Cost considerations
- Medical diagnosis and treatment advances

MS. DENISE E. FAGERBERG: I organized the symposium on AIDS that was held in Boston in April, 1985. Prior to that session, I conducted an informal survey of life insurance companies to get a feel for the impact AIDS had on the financial statements of life insurance companies that year. I received responses from 106 companies, which reported a total of 438 AIDS claims in 1985 on ordinary life policies. The average size of those claims was $53,600; the average size of the total claims was $7,000. To me that indicates a trend towards antiselection from people who have AIDS or who are at risk from AIDS. The survey also showed that in most cases the claims fell within the normal nonmedical limits of the insurance company.

Prior to this meeting, I conducted another survey to gauge the impact of AIDS in 1986. This time, 158 companies responded and reported a total of 1,913 ordinary life AIDS claims. The average size of the AIDS claims was $44,500;

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average size of total claims was $8,400. The AIDS claim represented 1/2% of total claims by volume and .2% by number. This again indicates the antiselection by size and again the claims tended to fall within the normal nonmedical underwriting limits of the company.

It also indicated two other things to me. There was a 50% increase in the response rate and a 350% increase in the number of claims. It shows that there is certainly an increase in the sensitivity of insurance companies to the issue as well as an increase in the total number of claims.

In the survey I also asked the companies if they were testing for AIDS or the presence of the human immunodeficiency virus (HIV) where possible. Ninety-one companies were testing -for the virus and 82 said they had questions on their applications, where they were permitted, pertaining to the presence of the virus. Twenty-seven companies felt that an additional reserve for AIDS claims was necessary, and 16 had lowered testing limits.

Mel Young of our Connecticut Office did a similar survey of reinsurers and discovered in 1986 that the reinsurance claims as a result of AIDS were 2.1% of total reinsurance claims by amount. In 1985 the number had been .7%.

According to the Center for Disease Control (CDC), in 1986 there were 4,729 AIDS deaths. While my survey is actually fairly small, and there may be some double counting in the number of claims versus the number of lives, it still captured a fair percentage of the AIDS deaths in 1986. And, of course, you must note this does not include group, credit or health claims.

The official claims statistics are: as of April 6 there have been 33,720 reported AIDS cases since 1981, with 19,551 deaths. Of all AIDS cases, 93% are males; 66% of the adult cases are homosexual and bisexual males; 17% are IV drug users.

Now, I want to introduce our panel to you. Our first speaker will be Dr. Leonardo Chait, who is the Medical Director of Executive Life in Los Angeles, California. He is also the Associate Professor of Clinical Medicine at UCLA and is actively involved in the AIDS education program at Executive Life. Our second speaker is Barbara Lautzenheiser, who is President of Lautzenheiser and

Associates and past president of the Society of Actuaries. And our third speaker is Howell Martyn, who is Vice President of Underwriting and Claims at Mutual Benefit. He is the Vice President of the Home Office Life Underwriters Association and is also a CLU.

DR. LEONARDO CHAIT: I am going to concentrate, obviously, on the medical aspects of AIDS. If I would have to make a very, very brief summary of what I am going to say I could put it in just a few words -- education is all we have, all we can do at this stage of the game. And, that's why I think that it is very important that business and industry in our country start stepping forward -- it's very important that our companies, besides worrying about the insurance business and how this is going to affect us, start doing our best in educating our employees. We have, I think, a fairly successful program of employee education at Executive Life. Insurance companies should continue funding projects for education of the general public. We are really in the midst of an epidemic that is very different from any epidemic that has ever affected mankind. This is different and let me tell you why.

All previous epidemics, first of all, have had short incubation periods. From the moment a person contracted the disease until the moment the disease was expressed was usually days, a few weeks, but not more than that. And, the disease, because of that, spread very rapidly, but not always killed, depending on the kind of disease that was the cause of the epidemic. But, after a short period, a large portion of the population has either been killed or has survived and is now immune to the disease. So, most of these scourges have stopped by themselves. In other cases, vaccines have been developed and vaccination of the public will create the immunity and the disease is stopped. Sometimes it is a combination of both of them. We have some disease, for example, like rubella (measles), where we are still vaccinating. We have some cases but there is a sizeable immune population so it doesn't spread like an epidemic.

Now, why is AIDS different?

First of all, there is a tremendously long incubation period. We are learning more and more that people can go for years without many manifestations of disease and then suddenly become sick. Initially, we used to think that if somebody had a confirmed positive blood test for AIDS there was a 20% chance

that they would develop AIDS and once they developed AIDS, they would die. Later it became 30%, then 40%, now the latest studies we have coming, some from San Francisco and some from Germany, show that in seven years 70% of the people that have been positive will have died. And if we extrapolate, there is the impression that possibly in ten years they might all be dead. So, it's really a very sobering thought. Obviously this continues to spread during this incubation period; people don't know that they are infected and they are passing it on. There is no vaccine that will stop it and there is no vaccine on the horizon. Let's not fool ourselves in thinking that there will be a quick fix for this. All experts are telling us that vaccines, if possible to develop, and we are not even sure that it will be possible to develop one, are probably ten years in the future, at best. I hate being a prophet of gloom, but I don't believe in miracles. Perhaps there might be a miracle breakthrough and I hope that I am mistaken, but it is the way things look. You who are specialists in statistics, that is the game we play and statistically the chance of developing any vaccine within the next ten years is very, very remote and it may not be possible to develop any vaccine, whatsoever.

By now we know that there are four different kinds of mutants of this virus. It is a little bit like the flu virus and we know that it has not been possible to develop a real good flu vaccine because from year to year the virus is changing. Well, the AIDS virus has that kind of a behavior, too. So even if we develop one vaccine it would not be 100% effective.

There are other problems, such as the tests that recognize infection. For example the current HIV test doesn't recognize all the variant viruses. Fortunately, so far only the HIV, the one that used to be called HTLV-III, is the only one present in our country and the only one that can be recognized by our test. But as soon as the other viruses start appearing here, our blood tests will have to be updated because they are not going to pick up the other viruses. To make things worse, there is no animal model of this disease in which we can inject the human AIDS viruses and produce the disease. There is only one animal in which we can set up an infection -- the chimpanzee. But the infected chimpanzees so far have not become sick. So they become carriers of the virus; we don't know if they will become sick after four or five years, or whatever, but so far we have not reproduced the disease in chimpanzees. There is another disease that infects some rhesus monkeys. It's called TLV III. This one gives

a disease to these monkeys that is quite similar to AIDS and perhaps might be used as a model, but it's not a human virus. So you can see how difficult this is going to be.

From the standpoint of progress in treatment, you probably all have heard about the AZT drug that has been licensed for use -- it's been used in our country. It so far is no cure, but probably it can prolong life. There are some clones of it being studied and there is a tremendous ongoing effort but they have not found even a possible cure. There is a new kind of vaccine trial that even the people who are developing it call "futuristic" because nothing of that sort has even been tried before. It is something that they call an antivaccine. I am a physician and it is the first time I have heard this expression, so, you can see how unusual these things are.

There are problems that we haven't even started to face yet. For example, what's happening in our prisons? We get prisoners going in and out through a revolving door. We know the high incidence of homosexuality in prisons; we know the high incidence of drug abuse in prison. How many people that are going into prison without AIDS will be coming out of the prison with AIDS and continue to spread it?

There are some other finer points we have learned recently and that may help to allay some questions that may be in your mind. We know that the AIDS virus is present in most body fluids; for example, it's not only just in semen, and vaginal fluids but also in tears, saliva, and urine. How much of a threat are these other contaminated fluids? Well, apparently there is a very big difference. The amount of viral particles present in tears, in saliva, and in urine is so small that apparently it is very difficult to contract the disease by exposure to those fluids. It's mainly fluids that contain lymphocytes that carry the virus in higher concentrations and that is mainly blood, semen and vaginal fluids. However, nobody can tell as this is such a slow infection that if a person gets very few particles of virus maybe it will take twenty years until it builds up to a sufficient level. So, we cannot be completely sure yet.

As far as the chances of getting this disease from one exposure, or from multiple exposures, there have already been a series of well-documented cases of persons whose sexual partners have had AIDS or have been discovered sometime

later to have had AIDS and their partners are not positive; their blood has been tested and the results are not positive. It is true that there is a gap between infection and until the blood test becomes positive. But that period, so far as we know, is usually a few weeks, and the longest ever reported is six months. By now we know that there are some people that have been exposed and have not developed any blood changes within six or more months. On the other hand, there are some other individuals who have had just one exposure with very little trauma and have been infected. There is a horrendous case in Australia in which eight ladies were artificially inseminated with sperm from a donor and the donor was found out later on to have had AIDS. Four of these eight ladies have become blood positive for AIDS. So, that was just one well-documented exposure.

There are some interesting things that I have discovered on reviewing the medical literature for AIDS -- some things that were totally unexpected and have nothing to do with AIDS. Military recruits get all sorts of vaccines -- well, recently one of our military recruits got a smallpox vaccination and it became a very wide-spread disease because then they found out that he was positive for AIDS and his immune system was depressed. Now the question is why are our military recruits getting smallpox vaccinations, if smallpox has disappeared? And then I learned in the medical literature that it is true, but there is the danger of biological warfare, so our authorities are concerned about the possibilities of smallpox being used for military warfare. The ridiculous thing is that when vaccinating against smallpox you develop immunity in one week. If somebody is going to use something for biological warfare it will not be smallpox; there are much worse things than that. On the other hand, apparently the Russians stopped vaccinating their soldiers between 1979 and 1983; then they discovered that some of the European countries were still doing it so the Russians resumed and we resumed.

I want to come up with one last plea. I see that here we have all ranges of ages -- some obviously are more exposed to getting this disease than others, but I still think that whether we want it or not we are all in this boat and the reason that we are all in this boat is that AIDS is going to stay here for at least ten and maybe twenty more years and maybe forever. So, some of us are already at the stage in our lives in which we are in separate, monogamous relationships and we feel safe. But our children are exposed, our grandchildren

are going to be exposed, and whatever we do now has a lot to do with how big the pool of infected individuals will be. That determines the risk at which they will be exposed. That is what is really most important and that's why it puzzles me that so far our government has done so little, especially in education, which is the only thing we have. All western democracies, England, the Scandinavian countries, are having much less of the problem than we are. France has done much more official education than what we have done. So, this is my plea -- let us start doing what our government has not been doing.

MS. BARBARA J. LAUTZENHEISER: How many of you are concerned about AIDS antiselection in your company? How many of you have a task force comprised of the actuarial department, the underwriting department, the law department, the claims department to assure that your company is not already suffering from antiselection? How many of you are actively working in your domiciliary state to make sure that legislation doesn't get passed there? I hope you will take action on each and every one of those.

Denise talked to you about the number of cases that we already have -- almost 34,000 cases as of April 6, and 58% of those have already died. One month before that, between March 9 and April 6, there was an increase of over 1,700 cases. That's 62 new cases per day. Those are numbers to which we should be paying attention. In June, 1986 the CDC predicted that we would have between 14,000 to 18,000 new cases in the United States by 1988; we now have a little over 13,000. I give you that number so that you have some idea of how close the CDC's 1991 estimates are, which you heard before and which all of you probably do not believe. My point is that they are not that far off target and, in fact, their numbers may end up being low.

What about the number of those who are infected? It started out with original estimates of 400,000; then it's gone from a million to 2 million. *Business Week* in March of this year indicated that the CDC is estimating 10 million infections by 1991. We feel good because it's no longer doubling in the number of cases on a yearly basis; it's only doubling every two years. Think of that! Every two years the number is doubling! There are lots of statistics you have heard; maybe here are some you haven't heard. There are almost 500 children who have or had AIDS; 62% of those have died. One state, New York, has 31% of all known cases; California has 23%. New York, California, Florida, Texas and New

Jersey account for 72% of the entire total. But, even more significant, there is no state in the United States that has had less than 2 cases in 1987 and there is no state that has had less than four total cases since 1981. What we are talking about is something that is widespread across the United States. Cities in order of number of cases are New York, San Francisco, Los Angeles, Houston, Miami, D.C., Newark, Chicago, Dallas, Philadelphia, Atlanta, Boston, and it goes on.

We think that it is a young person's disease. Twenty-one percent are between 20 and 29. Forty-seven percent are between 30 and 39; but 21%, 1/5, are between 40 and 49, and 1/10 or 10% are over the age of 49. One company has most of its claims in the ages 60 and above; I assume that its market is a very high average age kind of market. We are talking about a disease that has been mostly concentrated in the IV drug abusers and the homosexual population. A prominent member of the gay community out in the California area indicates that the homosexual population is around 10% of the population. That tracks with Kinsey's report back in 1940 that also said that the percentage of men who have had at least one bisexual contact in the United States is between 40-46%. We have over 750,000 Americans who inject heroin or other drugs intravenously at least once a week. We have a similar number that do it less often. Mike Cowell has been working, and we owe him a great deal, with a whole bunch of numbers; he is showing an infection rate that is running at about 50% per year.

Yes, 73% of people with AIDS are, in fact, homosexual but one of the things we need to pay attention to is that this is not the only statistic that is significant. Dr. C. Everett Koop, Surgeon General, has said, "Clearly this disease, which strikes men and women, children and adults, people of all races, must be stopped." The critical part is that it is men and women, children and adults, people of all ages. Listen to these statistics, if you still think it is only a homosexual disease.

Dr. Thomas A. Peterman, of the CDC, studied husbands and wives of people who got AIDS infections from tainted blood in transfusions. Five percent of the men and 16% of the women who were sexually active became infected. A study by a Tennessee epidemiologist indicated that after four years of steady sexual contact, infected spouses passed the virus to their spouses "only about 20% of the time." How many of you would get on an airplane when you knew your chances of dying from that particular flight were 20%? That's exactly what

they're talking about; only 20% of the time. Of 22 military families studied by Major Redfield of the Walter Reed Army Institute of Research, 36% of the infected spouses passed the infection to their mates. Dr. Brian Saltzman of Montefiore Medical Center of New York City studied sexual partners of AIDS-infected IV drug abusers; none of the partners were IV drug abusers and 50% of the men and 42% of the women eventually became infected. In one study involving 58 couples at the University of Miami, 16 AIDS patients didn't take the advice of their doctors and continued to have unprotected sexual intercourse with their spouses and 13 of those 16 spouses, 80%, became infected. The point here being that it is clearly not an issue of what you are but what you do. It is a sexually transmitted disease and a disease that is passed by unsafe needles. My point in all of this is, the original statistics we talked about were based only on a homosexual community and IV drug abusers. You start taking that to the heterosexual community and the exposure numbers go even further than you have seen thus far.

For those of you whose underwriters or actuaries think that you don't write in that market, you had better take a look at some of these statistics. In November, 1985, one company began adding the HIV test to all other blood tests under medically underwritten applications. For the first two months they had 14 cases; only two of them were in a high-risk group; the other 12 were not; one was a female and there were 11 married men with children. If you want to use sexual orientation as a surrogate you find out you cannot because you cannot identify these people. The Home Office Reference Laboratory (HORL) reports 65% of their positive findings are not in high-risk areas. By 1991 the CDC says 80% will be coming from outside of New York City and San Francisco. Once again, if you think you don't write in that market or write in high-risk areas, you're just fooling yourself.

What does the mortality and the morbidity look like? Eighty-one percent of the AIDS patients diagnosed prior to January, 1985 are deceased; 90% are deceased after one year of getting an opportunistic disease. Statistics indicate that the first-year mortality is 45%; the second-year is 45%; the third-year is 35%; and 25% thereafter. Once you have the disease, you're in deep trouble. The average latency period among the homosexual community is four years. Dr. Chait commented about the long latency period being extremely significant, because the latency period we are seeing is in the homosexual community, which is generally

more sexually active than the heterosexual community. We don't know what the latency period is in a heterosexual community. The CDC percentage of conversion to AIDS from being infected with the virus started out in January, 1986 as being 5-19%; in June, 1986 the CDC upped that to 20-30% in five years; the National Institute of Health in July, 1986 said 35% in 6-8 years; the Academy of Sciences in October, 1986 said 50% within ten years; the German study we talked about said 75% within seven years; and, of course, the San Francisco studies are the ones most recently done and end up the most devastating. They start at 15% in three; 22% in six; and 33% in seven.

Some of the quotes are: Paul O'Malley, Director of the San Francisco Public Health Department, "What we're seeing now is the risk of mortality developing, of actually developing AIDS increases the second five years compared to the first five." What they hoped would happen, like with cancer, is that it would level out after five years or drop back down. It is not leveling; it is actually steepening the curve after the five-year period.

Dr. George Rutherford also of that same San Francisco Health Department said, "The longer one is infected, the higher are the chances of developing AIDS."

Dr. Harold Jaffe, an AIDS epidemiologist at the CDC working on that study said that they were unable to identify any factor other than time that triggers the onset of the disease.

The Navy Times, January 5, 1987, said, "Another year of tracking AIDS has convinced the military medical experts that the disease is even more deadly than originally thought. Knowledge gained by military researchers suggests that AIDS will kill 99.9% of those who are now exposed to the AIDS virus."

You add all of these statistics together and the table looks something like this. In three years, 6% mortality; five years, 15%; seven years, 33%; and take that curve on out and at the tenth year you are talking 56%. And you have to remember every one of these numbers is underestimated, due to underreporting and nonidentification of a lot of these as actually being AIDS. New York doesn't require you to do anything other than to show homicide, suicide, or natural causes. You can't even read a lot of death certificates in New York and find it.

AIDS UPDATE

AIDS is a chronic infection. Harvard's Doctor William Haseltine put it, "Once infected, a person is infected for the rest of his or her life."

The recent estimate by Dr. Rhame at the University of Minnesota said as many as 60% of those infected by HIV will develop within ten years, a dementia of such severity as to be permanently disabling. Now we are talking about disability income and health insurance, as well as the life insurance impact. What we probably see, due to a lot of the doctors' research, is even cancer beyond that; we are seeing diseases beyond AIDS. So we may not be seeing just the tip of an iceberg; what we may be seeing is the tip of the AIDS antibody and what it, in fact, can do.

Take a look at the 20% which is the lowest CDC figures on mortality. That 20% compared to an average healthy male aged 30 comes out to be 26 times standard -- 2600% mortality -- 5 times what we take in a normal substandard mortality rate. It's like issuing a policy to a 70-year-old at a 30-year-old price. Compare that with other diseases -- quadriplegic 750%; myocardial infarction (heart disease) 500%; diabetes at 400%; smoking at only 200% and you get some sense of what we are talking about as far as this disease is concerned. The hospital costs for an AIDS victim are running now from $36,000 to $140,000 depending on the case management. Some of the companies are showing $60,000-$70,000. You divide that by your 80% coinsurance factor; you're talking about $75,000-$85,000 in costs. If you do that at the $75,000 level it's 13 times the standard inpatient cost. AZT is going to extend life a little, but not enough to help us with our mortality cost on our insurance policy; and actually between the cost of the drug itself and the extension of possible hospitalization, it will increase those costs.

In spite of all of this, we have states that are prohibiting us from doing the testing. As you all know, California prohibits any test other than the T-cell test. We are working on trying to turn that around but we haven't seen much success yet. Wisconsin passed an antitesting bill back in 1985. Effective June 1 this year, we have overcome that. We will be able to test barring any implications or obstacles that we don't know about right now, but that's testing only for individual insurance. Antibody testing for group insurance is not allowed, including individually underwritten baby groups, and they put in an amendment saying that you cannot ask for the Medical Information Bureau (MIB) codes

either because they don't want that as a surrogate for testing. So for baby groups and major groups, there is not testing, and there is no asking of information from the MIB. As you all know, the District of Columbia has not only banned the AIDS antibody test, but the T-cell test as well. A Howard University study indicated that 91% of the companies have withdrawn from the DC area based on their sample. It is not known whether or not that will be turned around. Referring back to those cities I mentioned, the interesting thing about the District of Columbia is that in August it was the eighth largest city -- and in March it was the sixth. By April, it was the fifth. We told the District that people would move into the city, hoping to get insurance and help, because once there's a congregation that knows how to take care of AIDS patients, they are attracted there.

Massachusetts -- I could spend three hours just talking about the bottom line there -- the Insurance Commissioner is attempting to pass a regulation instead of legislation. We don't think he has the authority to do that. As I see it, the regulation will allow testing for life insurance with some very strict criteria that would have to be followed. There is less than a 15% probability, in my estimation, that we will be able to test for disability income and a zero probability that we will be able to test for health insurance in Massachusetts. I suspect that we'll end up in some court cases. There is also legislation that is being proposed that if what we do actually negatively impacts the homosexual community, then we are also in violation of the legislation.

Rhode Island has no action, but a pending bill exactly like the D.C. AIDS bill. Tennessee has six bills in their House and they are being introduced by the trial lawyers, we think to get even on the court reforms. So you will recognize we are an insurance industry. We are not a life insurance/health insurance industry. We are an insurance industry and we can't separate ourselves on that. Texas has two bills that are pending. The State of Washington had a bill but it was reported out unfavorably. Maine and New Hampshire will require informed consent. (New Hampshire is putting restrictions on the laboratories.) Vermont's bill has passed the Senate, but there appears to be no movement in the House. It is an informed consent bill, which says that if a person doesn't want you to report to the MIB you have to agree not to report. Hawaii's bill passed both House and Senate -- I forgot which one passed just last week. It's on the Governor's desk to be signed. The legislation is very much similar in

not allowing a report to the MIB. There is still a possibility of legislation in Illinois. We are talking about a regulation expected in New York within the next seven to ten days. I am assuming all of you have seen the NAIC guidelines.

Denise talked to you about the antiselection and we will go into that later. The real problem we have here is that you and I want to attack this from a logical basis and it is not a logical problem. It is a political problem. The real issue, as far as the gay community is concerned, (and it is the gay community that is causing the antitesting legislation) is discrimination in employment and housing. They also want health insurance very badly and are willing to take an assigned risk pool if we develop assigned risk pools. But, there again, they don't want it to be a preexisting condition if they are testing positive and that's not just having AIDS. Their main concern, as I say, is loss of employment if the employer finds out that they have tested positive. Naturally, if they lose employment, they also lose their insurance which causes them a different consideration. They are also very, very concerned about quarantine. They are almost paranoid about it. On a scale of one to ten you find their concern is about a 16. When we say that can't possibly happen, they talk to us about the Japanese, and it's pretty tough for you to argue that one out. There are states that make it a criminal offense to knowingly transmit the disease. So it's not a concern that is totally unfounded.

A second, bigger problem just came about in the last month. The California gay community, I believe, has finally reached what I call, and Elizabeth Kubler-Ross calls in her book *On Death and Dying*, the fifth stage: acceptance. They are beginning to accept that the disease kills. It's just a matter of when, not if, and what they want is insurance. They are no longer caring about confidentiality. They will be pushing across these United States in order to get insurance, to get health insurance to cover themselves, and life insurance so that their partner, friend, lover, whatever you want to call him, also has money, because it is a high probability that he also will die. The beneficiaries are sometimes mothers or children. They want the money. They are accepting it and wanting the benefits from that sort of thing. They are well positioned. The gay community has a very large number of very bright people. They have money. They are politically positioned. They vote in a block and many of them are actually in a legislative staff position in each and every one of your states and in the Federal Government.

What is the implication beyond AIDS? When does the Diabetic Foundation or the M.S. Foundation walk through the door and say, "Why do I have to pay more?" or, "Why do you not allow me to have insurance when, in fact, the gay community can have insurance?" What would happen if September 1, 1987, Jerry Lewis came out on his program and said we discriminate against his kids. It's not an unlikely situation. The public just doesn't understand where we are coming from. They understand risk classification. They don't understand pricing. They don't understand spreading a risk.

Let me summarize by giving you some comments. They are from the D.C. hearings -- "Should we be able to categorize only on what a person can control?" "Insurers should bear the cost of life-threatening diseases, not the public." Councilman Ray, Chairman of the Committee, doesn't think it's fair that he can get life insurance but someone "who has only a 20% of probability of dying in the next five years can't -- after all, they need it."

Do we discriminate against people with multiple sclerosis? Comments made at the NAIC December meeting given by the gay community were, "The Insurance Industry wishes to use the test to avoid paying the costs associated with AIDS claims." "Testing will increase the economic burden on states and the Federal Government because public welfare programs, instead of insurance companies, will bear the cost." The Chief Examiner makes a comment, when you say it isn't fair that the healthy pay for the unhealthy, "Fair has lots of definitions."

Commissioner Hiam in testimony before the Massachusetts Insurance Department said that insurers are reacting to AIDS in haste and panic. We're not reacting in haste and panic. We are not reacting the way we should and so I hope that the next time you come to an actuarial meeting and someone asks if you are concerned, if you have established a task force and if you are working in your state, everyone will raise his or her hand.

MR. HOWELL C. MARTYN: One of the challenges about being last on a program, is that my statistics are already out of date and half of my comments have already been made. Barbara and Dr. Chait have really already explained to you what AIDS is and how it affects our insurance community. What I'm going to try to do is just give you an underwriter's hands-on description as to the kinds of things we can do, the kinds of underwriting strategies that are appropriate, the

kinds that are inappropriate, what we should do, what we can do, and I'll start right off by echoing what Barbara just got through saying.

The very first thing you should do in your own company is set up some kind of a formal or informal task force consisting of your actuarial department, your pricing people, an underwriter, a lawyer, a claims person and a medical director, to regularly discuss the AIDS issue. The ignorance about this issue within our own companies is amazing; we can't afford that. Get together and start talking about the pragmatics of it because they are difficult.

My list of things you can do doesn't include one brand new idea. There is nothing revolutionary in it at all. I just hope by outlining them you will get a perspective and maybe come away with a few different ideas than you came in with.

First off, a very general but critical caution, is that whatever kind of underwriting strategies you pick, whatever the kind of things that you do, do not target, for example, young males in narrow geographical areas like Greenwich Village; or occupational groups that are presumed to be at higher risks for AIDS; or applications that have "funny" beneficiary designations. No matter what you intended, those things are going to be inferred to be surrogate factors for underwriting lifestyles. To that extent they may well be illegal; they aren't necessary, in my judgment, and they are always inflammatory. And that's one of the major problems we have in the industry today. Our mission, obviously, is not mores -- it's mortality. When we dwell on the mores of our customers we only make the problem worse for all of us. So, remember what grandma used to say about sticking to your knitting. I have seen, unfortunately, reinsurance manuals or presentations by prestigious insurers that focus explicitly on sex, beneficiary designations, marital status and even on homosexuals. I think they do all of us and the industry a real disservice when they do that. Those kinds of directions and words are unavoidable, we're bombarded by them every day in the media, but when we use them in our underwriting strategies, even if they are legal in a strict sense, and I'm not sure they always are, they're pejorative and have to be avoided. I think that they are in conflict with the NAIC guidelines that Barbara mentioned and which I'll soon talk about.

Be sure that your underwriters understand the importance of focusing on facts. In underwriting, facts are risk factors, not inferences. This seems obvious, but it has a very important offshoot. Because you can't afford to have any allusions to your applicant's sexual preference found in your underwriting files. Comments like, "young male florist, better check further and get AIDS test," are stupid. They're offensive to some people, and are unnecessary for us to do our job. These types of comments also make us look hypocritical to our critics; critics who are loud. In general, nothing gets underwriters worse press than off-handed, unthinking comments by those who think they're addressing the real issue. Every underwriter, and this goes beyond the AIDS concept, always ought to assume that whatever comments he or she makes will turn up at trial. It's happened and it's going to happen more. And, while I think that this is generally good advice, it is also critical advice when we deal with the AIDS issue.

Now let's look at some of the specifics. What are the choices that we have? What are the pros and cons of doing or not doing some of these things? Number one, obviously, is you can test for the HIV antibody except in the few states and situations that Barbara has already mentioned. Testing gets very bad press because it doesn't prove that if you test positive you're going to get the disease. I don't think any of the medical tests that we use in underwriting prove much of anything and, in fact, in clinical medicine, testing doesn't prove anything. What's done is to narrow the focus and to improve the accuracy of diagnosis and treatment. One high blood sugar level doesn't prove that you've got diabetes. One episode of ST-junction depression in an exercise electrocardiogram (EKG) doesn't prove that you've got ischemia. High cholesterol doesn't prove that you've got arteriosclerosis, etc. But each of those facts obviously puts the owner thereof at a much higher risk, of which the likely consequence is the diagnosis which was mentioned. Our job isn't to make that diagnosis; but it's only to define reasonably homogeneous groups. Now the standard HIV antibody test, and I'm sure you're familiar with this, is a repeated enzyme-linked immunosorbent assay (ELISA) test followed by the so-called Western Blot Assay. Now those tests, following that protocol, are better than 99% accurate for establishing the presence of the AIDS antibody.

That's a better record than any other test that I know of in medicine. The most optimistic statistic that I have heard to date, and I sure have heard a lot of less

optimistic ones in the last few minutes, is that 15% of otherwise asymptomatic people with a positive antibody test will develop clinical AIDS manifested within five years; and of those, virtually 100% will die within two years. Now, the high range estimates go from 30-50% in five years and I just heard 70% a few minutes ago. Those odds translated into mortality percentiles, and the best percentage that I've heard is the one that Barbara just mentioned, 2600%. If some of those time frames that we've just been talking about become true then the mortality rates become substantially higher. No insurer I know has found any way to cover that kind of risk. So, testing makes a lot of sense. One year ago there were companies testing routinely for antibodies in blood only for face amounts of a million dollars and, even more, and very few were testing for amounts of $500,000 or less. Today, the reverse is true.

The Travelers just sponsored a recent survey of 22 companies, including my own, which showed that 12 of those 22 were testing routinely by age and amount for amounts under $500,000; five of them for amounts between $500,000 and a million; and only five at amounts of $1,000,000 or more. I estimate that the median amount for the group of 22 was in the area of $300,000. My own company is, at the moment, at $500,000 and I am actively campaigning to cut that in half. It's not an area where I think I want my company to be visibly liberal. You certainly don't want to be known as the company that doesn't test. Obviously, you want to set your test limits low enough to do you some good but not so low you end up driving away good business or driving away your field force. Ultimately, your testing threshold tends to be set by competitive considerations as much as anything, and that's not bad. That underscores something that's very important; we in this room are competitors; we are in a competitive industry.

You can also add AIDS questions or AIDS-related questions to your applications or your application supplements. In principle, I think this is a good idea. In reality, it only is defensive underwriting. Its major contribution is that it will help to resist material misrepresentation in the case of a contestable claim. There's nothing wrong with that, but I'm not so sure there's that much value added by doing that over and against the questions that we already ask on most of our applications. In other words, misrepresentation of a specific AIDS question is likely to involve misrepresentation of other questions that we typically

already ask about diseases of the nervous system, gastric systems, tumors, pulmonary disorders, weight loss, etc.

I was surprised to hear from Denise a little while ago that as many as 82 companies out of 158 had already made some change in their application terminology. I did sort of a quick and dirty verbal survey late last year and there were only a handful; a whole lot of people were thinking about it but they hadn't done it yet. It looks like all of a sudden they've done it. So my remarks may be already out of date. Bear in mind, however unfair it is, and I think it's grossly unfair to the industry, you can't ask whether an applicant has tested positively. Now, that's ridiculous because no one yet suggests that you can't ask if an applicant has had an abnormal electroencephalogram (EEG), EKG, Computerized Axial Tomography (CAT) Scan or whatever. But, so far, the reality is we can't do it. Which makes me repeat the main issue that Barbara made, that we fight hard to preserve our right to test for conditions that have substantial effects on early death or disability. Personally, I think, the real issue confronting the insurance industry -- not the life, disability, group or the individual industry; we're in there with the property and casualty companies -- is not taxation of inside build-up or possible Federal regulation, it isn't even AIDS; it's the risk classification system itself. And, to me that's the heart and core of our business; if that's tampered with significantly then we won't have the same kind of business that we do today.

I mentioned before that the NAIC has developed a set of guidelines for underwriting AIDS and while I think it's disturbing to all of us whenever underwriting is subjected to any kind of outside regulation, the fact of the matter is the NAIC guidelines are pretty reasonable and I would recommend that you adopt them and use them in all jurisdictions whether or not they are required. I think that gives us some credibility, and because they don't significantly impair our right to underwrite properly I would recommend it. Remember what the great philosopher said, "Don't sweat the small stuff."

You can lower nonmedical limits. Two years ago that would have been absolutely an anathema and no underwriter would have dared to make such a recommendation to his Sales VP. Denise did a little survey at the Boston meeting last year, asking how many companies were considering doing that and I think everybody was shocked to see some hands go up. Now you tell me that 16 out of 158 have

already done it. I was going to say in my notes that I predict that somebody will do it by the end of the year. Sixteen have already done it. What good does it do to lower your nonmedical limits? I think the major benefit is that to the extent you shift nonmedical to paramedical you'll get better histories. (I'll spend more time on that very important point soon.) The prospect of a body physical by a physician will probably also dissuade the few people who actually have developed overt symptoms of AIDS. There are not many of those, but it will be more difficult for them to disguise that if they are subject to a body physical.

Similarly, you can lower your inspection report limits. The inspection companies have the same constraints as we do about nonfactual information so I'm not sure that having more inspection reports is going to save you more specific AIDS claims but I think that there is some value, there is some policing effect, of having a third-party verification process going on, that's known up-front to both your applicant and to your agents. At least, if you don't elect to lower your inspection thresholds, I don't think it's an opportune time to increase them. We've gone through a decade where inspection thresholds have been rapidly increased and I don't think that's appropriate anymore.

You can also elect to change your inspection limits or your nonmedical limits or anything else only in the high-risk areas which Barbara recited. If you do, I suggest strongly that you do it for both sexes, all occupations, all beneficiary designations; don't target narrow groups, or narrowly defined groups identified by nonspecific criteria. That looks like underwriting by sexual preference. I'm not sure, however, that there's a whole lot of value added by zeroing in on only the major metropolitan areas. There is no question that today that's where AIDS is but there's also no question that that's where most of your business is. So, I wonder if it wouldn't be a whole lot easier if you're going to change your underwriting guidelines to do it across the board. It's a lot easier to explain to everybody, a lot easier to administer, and in the long run I'm not sure that it will be a lot more expensive.

Incidentally, that raises an interesting point. Everything we talk about in underwriting AIDS today has a common characteristic. It all costs money; sometimes quite a lot of money. Any of you in underwriting management, where I spent my last twenty years, have spent careers annually cutting underwriting

costs, trying to cut your budget, hopefully without cutting underwriting muscle. Sometimes we did go a little overboard but we got pretty good at it. But, today, Janus, the god of actuaries who looked forward and backward at the same time, is looking the other way now and I think underwriting costs have got to increase. If we're doing our job, the cost benefit will increase. But, our job is to focus those costs as well as we can. Let's not kid ourselves, and let's not kid our staffs at home that out-of-pocket increases -- cost increases for inspections, exams, and blood tests -- aren't going to increase.

Actually I think that there's a point in that message because it does help to focus us on what our mission really is. That's not just to maximize new sales, but I think it's to provide insurance against the risk of premature death at a rate that's profitable to us and economical to the buyer. To do that you've got to have risk analysis. So, in our annual budget struggles I think that we have an opportunity, if not an obligation, to demonstrate that more underwriting has a positive payback. We've got to be prepared to back that up rationally, and I don't think it's all that hard, to be honest with you, but we can't duck it. It is fundamental to our survival as an industry. I did some rough estimates not long ago based on my recommended level of testing at $250,000, presuming a 1% rate of positive HIVs at that level and a death rate of 15% in seven years, that gave a cost benefit which exceeded three to one. That's about the most conservative estimate you'll hear. Dr. Chait mentioned 70% in seven years.

Incidentally, when and if you change your blood chemistry profile limits, don't anticipate negative field reaction. You don't want to dump on them, you want to present it carefully and strategically. But your good agents are as worried about AIDS as you and I are. It threatens their livelihood just as much as it does ours. So I think that they'll be receptive to a rational, reasonably presented underwriting program that you put before them as long as they're not completely outside the industry's mainstream. I was talking to one of our agents in California just the other day, who has worked hard with the legislature, unsuccessfully to date, to try and turn around that state's restriction on HIV testing and he asked me point blank, "Are you considering reducing our blood chemistry threshold from $500,000?" and I said, "Yes, probably to $250,000," and he said, "Good."

I'm going to skip a couple of little items here and get on to attending physicians' statements, (APS) as your underwriter knows them. You ought to be considering how to target those better and possibly even get more of them; maybe at the target ages of 20-50 and maybe only in the high risk areas, but in any event, more of them. Especially educate your underwriters about the need for getting APSs for histories for cause, not just routinely because it's $200,000 at age 45. You can overdo that, you can overwhelm your field with APSs. They do take a long time and they do delay cases, which is a legitimate field concern. But, I strongly recommend that you review whatever APS guidelines you presently have. If you don't have any, get some! Talk to your underwriters about them and eventually even talk to your field about them. Again, they recognize what's going on and if you can sell them, sign them on; you'll do far better.

The most important underwriting strategy of all to deal with AIDS is to make up your own set of AIDS underwriting guidelines. It's a tough job to do. The medical terminology is positively overwhelming, a lot of it is unpronounceable, but get together a task force of at least a couple of key underwriters, a physician, and a lawyer. I guarantee that they will learn more about the pragmatics of underwriting AIDS in the few weeks that they struggle with that than they will in any other way. Then you have a cadre of people who really understand the issues within the underwriting department. I think, personally, as a matter of policy, you ought to have a defensible underwriting strategy of your own that you stand behind. If you use a reinsurer's manual for your underwriting, as I do myself, I still think that you ought to make the effort to develop your own set of AIDS guidelines. It's important that you can stand behind this.

It's not an easy job so I'll close with just a couple of suggestions as to how you might go about doing it, because just listing the symptoms that you're all familiar with, that clearly demonstrate a tendency to AIDS, doesn't do anybody any good. Everybody knows what to do when you get to a stage like that. But there are a whole lot of little conditions that we are conditioned as underwriters to ignore, that you can't ignore any more, and they range from things like thrush and herpes, which we're beginning to pay a lot more attention to, to hepatitis to weight loss, to hemorrhoids. Minor histories of things like bronchitis, diarrhea, gastritis, things like flu, especially when they occur in combination, are important risk factors all by themselves. Now, one episode doesn't

make a rejection. You can't defend that. But two, or three, or four, where do you draw the line? The point that I think is critical is you can defend what is known as adverse underwriting action based only on the existence of an arbitrary number (as long as it's not unreasonable) of identified risk factors. Your job is to enumerate the risk factors that are appropriate based on your underwriting philosophy.

Other risk factors are obviously age. Ninety percent of the AIDS cases occur between the ages of 20-50. And, I think you ought to have different underwriting guidelines -- AIDS underwriting guidelines -- for juveniles and seniors. Sex is certainly a risk factor, but I strongly recommend you don't use it. I think it sets us up for other arguments that probably aren't worth the candle and, frankly, that majority of our exposures are on males anyway. You can certainly use location, that is a legitimate risk factor. Treating California differently than North Dakota not only makes sense, but I think you ought to; but don't red line. You can't treat Greenwich Village differently than you treat New York City. Marital status and beneficiary designations don't belong in your AIDS underwriting guideline. Those are not risk factors. They belong in your insurable interest chapters and they're important there; don't overlook them, but don't put them in your AIDS guideline. Occupation is certainly a risk factor but not for AIDS. Don't put it in there. It makes you look hypocritical.

I will give you an example: a 36-year-old person who lives in Greenwich Village, New York, is ipso facto at greater risk than a 58-year-old living in Colorado Springs. The 58-year-old living in Colorado Springs who has a history of simple pneumonia can and probably should be underwritten liberally. The 36-year-old in New York City who has a history of pneumonia shouldn't be underwritten liberally, because that person has three risk factors -- location, age, and a potentially related history. I'll leave it up to your own underwriting philosophy how many of those kinds of risk factors you'll tolerate before you do something, but don't let it get out of hand. How many clues will you tolerate before you do something else? Get a blood test, get another APS, get an exam, it's up to you, but don't just sit there when you're confronted with those kinds of combinations. They are important! You've got to do something! You can't be ridiculous about it without alienating your field but you can't ignore it.

Next to creating your own underwriting guidelines, I think the single most important underwriting factor is developing individuals' medical histories. And, I repeat: all of those little histories which your hands-on, day-to-day underwriters have conditioned themselves to ignore in the past that didn't mean anything -- now they do, and particularly when they occur in combination. Combination absolutely means something. So, no matter how difficult it is in the real world, your job still is to determine the relative risks of people who exhibit generally similar characteristics, not predict when individuals will die, which is what we are criticized for doing even though we don't do it. So, as far as I'm concerned, pay more attention to individual histories in everyday underwriting. That will pay more dividends (whether you're a stock company or a mutual company) than any other single thing. And, the other thing you'll need is lots of luck.

MR. CHARLES G. BENTZIN: One thing has bothered me, and perhaps you can provide some background on it. Has there been a history of any other disease such as this which has suddenly appeared seemingly out of nowhere? Why haven't we seen this before?

DR. CHAIT: Perhaps we could say that there was one, which was the appearance of syphilis as an epidemic. We are still disputing whether the Spaniards brought syphilis to the New World or whether the Conquistadors brought syphilis to the Old World from America. That hasn't been clarified. Now, the fascinating thing about AIDS is that there are already a few theories. One is that this is a mainly a virus that tended to be present in some monkeys in Africa and there was a mutation. We know that this virus tends to mutate a lot and it suddenly became infectual to human beings. This was the first hypothesis and is no longer the most believable. It is much more likely that AIDS has been present in Africa in small communities for long periods of time. And what has happened is that social upheaval, uprooting, and migration to the cities contributed to spread the disease. In the cities the sexual behavior became more loose also. This compounded with the problem of prostitution in the cities, not present in the small rural communities, and that's what probably created the sudden change in this disease that was unknown before.

MR. CARL B. WRIGHT: We heard some discussion this morning about the accuracy of the protocol testing that's gone on. But in the recent AIDS under-

writing newsletter, although they seem to indicate that maybe there's one chance in a thousand of giving you a false positive, there seems to be about a 25% chance or one in four of getting false negatives. Would anyone care to comment on that and is any action being taken to try and work with the Food and Drug Administration (FDA) to change to a more accurate protocol than is currently required?

MR. MARTYN: I don't think it's the protocol that's the problem. We can't find any that are better. The difficulty is that we have no tests for AIDS; we have a test for AIDS antibodies. Dr. Chait has said that bodies don't always produce antibodies at the same rate, and until they do produce those antibodies you are going to get false negatives. We'd love a better test, we just can't find one. It's not really the FDA's fault, unless Dr. Chait has some knowledge I don't have.

DR. CHAIT: Well, as I mentioned previously, it's taken time to develop those antibodies. It is possible to develop tests to eliminate false negatives but those research methods are very, very difficult, very expensive, and very few laboratories can do it. It's not practical.

MR. WRIGHT: Is it necessary to state in your questionnaire and in your consent form the protocol that you're going to follow or the actual testing you are going to do? It seems to me we have a possibility of having an enormous filing problem with the states every time we change how we test.

MR. MARTYN: I don't know if that's an application question, but the two major labs that probably service 90% of our blood chemistry business automatically include a disclosure slip with the blood kits which do just that. I think in Massachusetts they want to make that about a four-page document rather than just a simple disclosure. Does that answer your question?

MR. WRIGHT: I guess. Should the companies themselves be indicating exactly how the testing is going to be done?

MR. MARTYN: The NAIC guidelines require that if you do in fact test, then that three-step protocol must be used. Now, I believe there is only one state that has passed that legislation and two that have regulations. So it's not

really a rule. The major concerns of the gay community are the false positives so they are pressuring for that in any state where they can get legislation or regulation.

MR. DONALD ROSS III*: One of the problems that seems to be hampering us in the long term, relative to a vaccine, a pill, or an eventual cure "x" number of decades down the road, seems to center on medical chauvinism, for lack of a better expression, notably that between the United States and France. And, I am wondering out loud if there is any likelihood of that being resolved or if the U.S. and the French scientists, on what appear to be parallel routes to the same goal, will get together and hopefully speed up the whole process?

DR. CHAIT: Fortunately, there have been improvements. I won't call it medical chauvinism; really what's behind this is money. The French discovered this virus a few weeks earlier and then the development of tests came based on the virus; and in doing these tests, which is part of this, there is a lot of money. So, who had the right to that patent? This is behind the fight between the French scientists and our scientists. Finally, it has been settled and we no longer call this virus HTLV-III and LAV which were the American and the French names. There is an international name which is HIV and there is now more, much more, cooperation.

MR. ROSS: In my work, I liken myself to a traveling fly on the wall in the sense of being a reinsurance representative. I'm in touch with underwriters on every level, from your's on down. I see a lot more of human nature in terms of the use of risk factors than you just espoused very eloquently here. For example, it's not at all uncommon for an underwriter to say, "Don, tell me again (not that I did it the first place) what the zip code is of the Castro District in San Francisco." I guess what I'm saying is that much of this is done sub rosa with a great deal of outward conformance to the guidelines and risk factors laid down and with a keen eye toward legal consequences. Each person has his or her own, say, defensive mechanisms when it comes to underwriting.

* Mr. Ross, not a member of the Society, is Assistant Vice President of Reinsurance with Phoenix Mutual Life Insurance Company in Hartford, Connecticut.

The problem is that the members of the gay community hear about it and when you try to negotiate and try to talk in terms of not needing legislation, they say, "But what about?. . ." and tick off about twenty abuses. It is very difficult to try and maintain our ability to test when many companies are not doing nonsexual orientation kinds of underwriting.

MR. JOHN J. FAHRENBACH: Can you give us any information on how reinsurance could help us -- possibly stop-loss? Do you have any information on how companies are pricing for AIDS? Do you know of anybody that has raised their pricing mortality, perhaps on term products?

MS. LAUTZENHEISER: I am not aware of anyone who has raised this mortality assumption. I think a lot of companies are no longer making the assumptions of 2% decrease or improvement of any kind in mortality or more or less levelizing that kind of mortality improvement. Companies are individually taking a look at their reserves as Denise indicated. There are several, I think, 27, companies that are taking a look at additional increases in reserves. I am not familiar with reinsurance possibilities.

If they are concerned, one of their best pieces will be education and seeing many companies do correct underwriting and are lowering blood chemistry limits. I think that that is still the best way.

MR. FAHRENBACH: Do you really see it as an underwriting problem and not as a reinsurance problem?

MS. LAUTZENHEISER: I haven't yet been able to find a reinsurance problem. It is not like the unisex, where if you had an average balance across the United States you could possibly solve it with reinsurance. There's just no way I know of that you can charge $120 for only seven years and pay out $100,000. Whether you're doing reinsurance or you're doing direct insurance, it just doesn't work.

I think one of the real difficulties in finding a reinsurance solution is that in many instances you don't know what an AIDS death claim is. In New York State you seldom know. In other areas, you are frequently not given the diagnosis of AIDS on the death certificate. It's something else, although you can read

between the lines, and, I think, usually successfully. So I'm not sure any kind of a stop-loss arrangement would identify a level of AIDS claims.

MR. G. WILLIAM BOYD: Certainly you can use stop-loss to cover AIDS claims but I think what you have to remember is that I've never seen stop-loss that wasn't optionally renewable. And, so as all of the panelists have indicated it's not a short-term risk; it's going to be with us for many years to come and stop-loss may not be affordable to you when you need it. And, another thing I'd like to throw out would be just a back-up to what Barbara said as far as who is testing positive. I know at BMA we tracked our results and we've had about 30 positives so far. I'd say probably ten have been who I would have thought would have been likely candidates, such as florists, clothes designers, bartenders, etc. But we've also had doctors, lawyers, executives, you name it.

MR. BENTZIN: At least as far as the moral overtones go, where people were originally saying the that this was retribution for ungodly sexual acts, etc., I'd like to draw an historical parallel to that which occurred in the 1800s with a Dr. Urlich in his famous 606. Dr. Urlich was a very famous German physician who attempted to develop a cure for syphilis. He was subjected to the same sort of moral overtones -- that somehow syphilis was retribution for ungodly sex acts. Six hundred and six came about because they didn't have the high-powered vaccines that we have today, but they had and they were using cyanide. They had to determine how much cyanide they could use to kill the syphilis, but not so much as to kill the patient, and it took 606 experiments to accomplish that. So I merely want to point out, that, if you are looking for an interesting political, moral parallel, you might go back and study the history of Dr. Urlich and 606. I think you'll see some very, very surprising and some disturbing parallels.

MS. LAUTZENHEISER: We talk about the fact that we aren't doing enough research fast enough. I know of no other disease where we have known so much in such a short period of time. When I started this issue, 15-16 months ago, I had trouble finding any statistical data on it. A lot of it has come out over the last year. But the disease is not happening fast enough and it's very dangerous because you don't really know the length of the latency period. We don't see the results right away as Dr. Chait has said. It's an epidemic that is not going to show up for a very long time. I'd like to say that property/casualty people have been dealing in a long-tail business for a very long time.

This is the same. We have to start thinking today about our claims five and ten years from now because that's the issue we are talking about.

There is something more than that. It is true that at present there is lot of manpower invested in research, but initially the findings were almost lost. Second, education has been constantly shortchanged. The National Institute of Health requested a billion dollars that would be needed to study AIDS. I think the administration granted $250 million; finally Congress raised it to around $300-$400 million. So we are far below what should be done.

MR. GENE ECKSTUT: It seems to me the life insurance industry could provide a real service to the education campaign about how widespread the AIDS virus is by somehow pooling their statistics on the percentage of people who have taken the test that have tested positive. The insurance industry might even want to lower the underwriting limits for taking the tests so that they could get more reliable statistics.

MS. LAUTZENHEISER: To get those kinds of statistics, you end up again in some legislative problems. An interesting thing is that some of the states don't want you keeping any kind of statistics. It's been a real struggle. Even though you would not be publishing about individuals, they get nervous because you are keeping a separate file.