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EASTERN REGIONAL CONFERENCE ON
CHILDHOOD LEAD POISONING

Eastern Regional Conference on
Childhood Lead Poisoning held at the Delaware Academy
of Medicine, Lovering Avenue and Union Street,
Wilmington, Delaware, held on Friday, June 2, 1972,
beginning at 9:00 o'clock a.m.

Sponsored by the Delaware Chapter,
American Academy of Pediatrics

Host: MARJORIE J. McKUSICK, M.D.

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DR. McKUSICK: Good morning. I am Marjorie McKusick. I am very pleased to greet you all to our first Eastern Regional Conference on Childhood Lead Poisoning. We hope it will be not only the first, but the last.

As you know, the purpose of this conference is not only to educate, but to stimulate action. Lead poisoning is a preventable disease, and we are here to find out how to lick it. We need the combined efforts of many disciplines besides medicine. And here to greet us today is a man accustomed to translating ideas into action. We are honored to have his interest and support. I am pleased to introduce the Mayor of Wilmington, Mr. Harry G. Haskell. Mayor Haskell.

MAYOR HASKELL: Thank you very much. I really appreciate being asked to greet such a distinguished audience. And I noticed a few people who patched me up in the audience another time.

As a part-time owner of about eight kids and a person who has to decide on school budgets in Wilmington, I have a keen interest and obvious

involvement in trying to wish you well in your efforts to deal with a problem that I think is one of a lot of problems that hinder us in a way intellectually in this country when we try and deal with the disadvantaged children. It's not well understood as we go down the legislatures throughout the land and try and get the funds to deal with disadvantaged children. And in Wilmington 65 per cent of our kids are in some way disadvantaged. They ask you, are they attaining the achievement levels? And the answer often is no.

And I think that whether you talk about sickle cell anemia or whether you are talking about lead or something else, the kids in the ghetto areas are in the tough, old sections of the country, and have a very definite mental and medical problem that hinders their intellectual development, and this translates into a cynical approach in our legislatures in saying that it's because they are inferior in many cases, and I think it's just beginning to dawn on some of the people in this country that there is a very physical problem involved.

And so what you can do or find out about a problem like this that can lead to mental retardation and lots of other things would be a tremendous value in what I think is the basic battle in America outside of the international problem of how to get the people in our inner cities to have a fair break in the scheme of things. And I hope that you can come to grips with it today.

I understand that 5 per cent of our kids in Wilmington have this problem. That is a very rough figure. And it comes in the sections of the city where the poor people are, and obviously really may be a major factor throughout the country.

I wish you all the success. I am afraid a politician and a businessman cannot offer you any really intelligent advice, but good luck.

DR. McKUSICK: I would like to take a moment to make a couple announcements. Our first speaker this afternoon that is unlisted on our program will be Senator Roth, U. S. Senator for Delaware.

Omitted from the program, unfortunately, is a very fine speaker and one who

actually helped us develop our program. This is Attorney Jonathan Stein, who will be speaking also this afternoon. He is from the Welfare Rights organization, Community Legal Services in Philadelphia.

Luncheon is going to be served in the Home of Merciful Rest, which is across the street, so those of you that have tickets, proceed across the street after our meeting breaks up at noon.

Our moderator this morning is Dr. Warren Johnson. Dr. Johnson is a practicing pediatrician in Wilmington, Delaware. He is a fellow of the American Academy of Pediatrics and a member of our Delaware Chapter. In fact, he is our program chairman and has helped us also in developing this program. He will moderate the morning program dealing with the medical aspects of lead poisoning.

DR. JOHNSON: Before introducing the first half of the program speakers this morning, I would like to make two short notations. First of all, the speeches will be given consecutively in the sense that the question and answer period will come at the end at around shortly after 10:00 o'clock or so.

So that I ask that you hold your questions until we have the general question and answer period.

Secondly, when we go into the question and answer period, when you stand up, if you will please loudly and clearly state your name and your association and where you are from.

The first speaker this morning is Dr. Sidney Sussman, who received his medical degree from the University of Illinois in 1954. He was an intern at Kings County Hospital in Brooklyn and was a resident at the Kaiser Foundlings Hospital at the University of California, and then was an assistant chief of the pediatric isolation service, San Francisco General Hospital. Subsequently he was assistant professor in pediatrics, University of California. Then, an associate professor in pediatrics, Temple University at St. Christopher's Hospital for Children in Philadelphia. And is presently director of the outpatient department at St. Christopher's Hospital for Children in Philadelphia.

His particular interest is in organization of health care, especially in the low-

income areas, particularly dealing with aspects of lead poisoning. Dr. Sussman.

DR. SUSSMAN: Thank you very much, Dr. Johnson. It's a great pleasure to be here.

I have to apologize in that the title is not quite correct. It's an overview, both social and medical, but not economical. I think that the problem of lead poisoning is anything but economical. It's a very expensive problem financially speaking and it's taking a great toll on the children in the United States. The error is mine. It should have been economics.

In the few short moments I have with you this morning, I would like to take a look at some of the significant aspects that have developed both medically, socially and in the economic arena. Let's first look at the medical facets of this particular problem. One cannot dwell on all of them, but certainly hit some of the highlights. I would like first off to disspell something which has been, I think, a disservice to those who look at the problem and those who are asked to develop solutions. One

usually projects arguments about the problem of lead intoxication and the solutions and ask people for money and programs based on the magnitude of the problem.

Now, there was a day in this country when we saw a lot of lead encephalopathy and a lot of very severe neurologic handicaps from lead encephalopathy. And the literature is replete with this kind of information. It goes back to the 1950's and 1940's and into the 1960's. That era is over, it's gone. We really do not see youngsters with lead encephalopathy in any great degree any longer. And it's getting extremely rare to see children with demonstrable neurologic handicaps from lead intoxication. I think we mislead people when we say that we want to sell this particular problem and get help with the problem based on encephalopathy and severe neurologic handicaps. That was another era in the history of this problem, but for many reasons that is now gone. There is still a very low incidence of neurologic handicaps, but I think in the Chicago experience and some of the other experiences, and I

see Dr. Sachs is here, she may speak to this point. What we have entered into is what is now called a salient epidemic, and it's indeed salient in the sense that it's not that viable unless you went after it.

Youngsters who have asymptomatic lead intoxication. Asymptomatic in that when you talk to the mother, examine the child, the child is basically free of symptoms and does not have any physical abnormalities on a careful examination. This is sometimes called an increased body burden of lead. That doesn't make the problem any less significant, because we have moved out of the era of lead encephalopathy and now entering this era of asymptomatic cases. We have always had the asymptomatic case, but we have not dwelled very heavily on the asymptomatic case, but the youngsters who had very severe neurologic and mental handicaps from the problem.

If you take a look at the youngster with the asymptomatic problem, and they are numerous, you will find that they have a high lead level. That

is how it's defined. If you take X-rays, as seen over there on the viewing box, those X-rays belong to someone else, you often find that there are lead lines in the bones. This is an inert part of the body, and as far as we can tell, there are no demonstrable adverse effects from having lead in the bone, per se. It may get out of the bone and into some vital areas, but as long as it's in the bone, it probably is causing no great harm.

If you study some enzymes and enzymes are chemical catalysts in the body which help promote certain chemical reactions, you study certain enzymes, that is, alpha amino, delta amino levela acid dehydratase is a little bit low in some of these youngsters. So that the amount of lead in these youngsters who demonstrably have no outward clinical symptoms is enough to produce some chemical changes within the body and therefore, probably an adverse effect.

Now, Dr. Needleman, who formerly was at Temple Medical School, took a number of youngsters and clearly demonstrated that children who live in the

inner cities as compared to children who live in suburbs will have lead in excessive amounts well after they leave infancy. That is the youngsters that live in the inner city have a high amount as compared to those who have grown up in the suburbs.

This he showed by analyzing teeth, which must have been a very interesting research project, in a way, but yanking out teeth of small children at the age of 6 or 7 must have made mothers a little bit unhappy, but nevertheless, he got some very vital information demonstrated.

The children that live in the inner city have a very high amount of lead in teeth as compared to youngsters who live in the suburbs. This can only mean that they were exposed while living there to high lead amounts.

Now, what that does to the body is unknown at the moment. And I would say that while you can demonstrate that these youngsters who live in the inner city definitely carry with them an increased body burden of lead well into childhood and maybe throughout their lives, it has been very

hard to show that that has had any adverse neurologic effect or mental effect on acuity. There is a tremendous amount of speculation on this point and there's lots of people who feel that this may very well be so, but it's an undecided issue at the moment. I would say that based on what we know of lead, we may not have developed the right studies to show that lead does have an adverse effect on mental acuity over a long period of time. But I personally am not willing to wait 10 years or 20 years or 50 years until somebody produces the definitive study that shows that kind of a thing. I know, based on past experience, that lead loves the central nervous system or the brain. That is enough for me to proceed very aggressively in some kind of action program to eradicate the total problem of lead. It's also well known that lead has absolutely no physiological function in the body. It doesn't help anyone. It doesn't promote any reaction in the body. Yet everybody in this room has lead that is due to living in certain metropolitan areas, and other areas as well. And then, of course, the youngsters who eat lead have

an excessive amount. So it has no physiologic function. There is great speculation that over a long period of time it can shave some IQ points off of individuals. And I think that is enough, really, that is adequate, absolutely adequate background information on which we should take very strong action.

Now, when you go into areas of the kind that the Mayor of the City of Wilmington discussed with you, you will find that when you do a mass screening program, the incidence of youngsters with this high lead burden ranges somewhere between 5 and in some studies up to 25 per cent. There are some studies that say 40 per cent. I don't know what the figure is, but any time you get over 5 per cent, that is too much. That is an intolerable percentage figure and demands some action.

So it's rampant. It's rampant in every metropolitan area in the United States where there have been adequate investigations. That includes all the major cities up and down the Eastern Seaboard into Chicago, Detroit, New Orleans, etc. So it's

truly in the sense of definition, it's an epidemic. It's a salient epidemic.

Now, I don't want to talk at great length about the medical aspects, because when you discuss these medical aspects, one often thinks about treatment. You find a youngster and then you treat the youngster and you cure the youngster's problem.

I want to emphasize and I hope that you take away this as the major point of my discussion, I want to emphasize that we have arrived at the point where we can eradicate the total problem of lead. I think there is absolutely no doubt about this in the minds of everybody who has looked at this problem. And we should be satisfied with nothing less and we should not, less anybody divert our attention from that goal, not divert it into finding a lot of cases and treating them and so forth and so on. That is very important, but I stand before you today to tell you that we have enough information right now to eradicate this problem. We know the cause; it's lead. We know where it's found; it's mostly in paint that was plentiful before 1940,

found their way on the walls in houses which are still numerous in every city in the United States. We know the cause; we also know there are some oddball cases like earthenware and burning of batteries, but that isn't as important as far as the youngsters are concerned as the paint that is now flaking off those walls. That has clearly been identified. We know who is the victim. It's the small child who happens to be very oral, just a natural phenomenon of life, the youngsters between the age of 3 are very oral. They put everything in their mouths. Anything you give them, they put it in their mouths. So that is the host or the victim. And we know all about the epidemiology of how they finally get to the wall and find it on the wall or find it on the window sill and start eating the stuff. And we know how long it takes for them to build up a lead level in the body and produce a certain level and then symptoms. So we know all of this. There is no doubt about it. We probably know more about lead than we knew about polio before we really got to the point of almost total eradication of polio. But probably we know more about

lead than we do about a whole host of things that have been grabbed and almost totally eradicated. And it's a great enigma as to why we have been unable to mobilize ourselves to eradicate the problem.

Medicine has been involved. It's obviously a medical, social, political and economic issue. And maybe therein lies some of the reasons why we have a difficult time getting ahold of it and completely eradicating it. Medicine has done its thing. It has a very unique way of attacking different kinds of problems and trying to eradicate them. Very successful in dealing with germs and getting rid of germs. When it comes to medical, social problems like lead, it has a funny way of sort of backing away from the problem, not entirely, I don't want to be completely unfair to my colleagues, but I really think it does not do well in these medical, social problems. This problem, of course, is steep with politics and economics and it's really very surprising that a large profession which is really not only a medical kind of outfit, but medicine is also a very political profession who often gets involved in

all kinds of things but politics.

That sounds like a paradox, but if you worked in medicine, you would see how people work this through very well. It's political, but often backs away from politics, so it's no mystery to me that medicine has not been able to cope.

I think these are some of the reasons why we have had a hard time eradicating it. But let me talk about some other facets of this and discuss towards the end some of the possible ways in which we can go after this and eradicate the problem.

There have been some notable advances, and each one of these advances may represent a milestone on the way to potential eradication of the problem of lead.

First of all, there have been a number of published articles mostly through the 1960's trying to establish the amount of lead in normal individuals. People have gone into all parts of the world, rural areas, urban areas, undercivilized countries, etc. And it's pretty much agreed that people who live in urban areas usually have about 25

micrograms per cent lead. That is a bonus for living in an urban area. You can't escape it. This is one of the great advantages of living in an urban area that you pick up just under normal circumstances, 25 micrograms per cent lead. You get this from breathing the air, and there is nothing you can do about that. You must breathe. And you also get that from some of the delicious food that you eat which has lead in it, whether you know it or not. So you end up with about 25 micrograms.

In rural areas it's a little bit lower, maybe 20 or 15 micrograms. And for some people who live in urban areas it will get up to 40 micrograms. In that level there is hard to demonstrate that there is any adverse effect from lead except in some individuals you have a drop in this enzyme that I mentioned before, ALAD.

Now, it was extremely important to establish that figure, because it's not generally held that if an individual has an excess of 40 micrograms per cent of lead, the only way that that could have happened is by eating it from an extra

source, an extra normal source. And so when we deal with children who have levels above 40, we assume immediately that that child has been getting into lead in some way, and that calls for some action.

And in the City of Philadelphia it now calls for an inspection of the home and try to do something about the home to cut off the source. So not only has this established a so-called normal level and a level beyond which people might begin to show some adverse effects, but maybe even more important, it has allowed us to use a figure which forces an environmental attack. So any level over 40 should demand some kind of environmental attack.

We have also seen some marked advances in the area of education. I would say that if there is any one factor which has contributed to a noticeable change in lead, it probably has been the concerted effort of the educators, whoever they may be, and the health department in medicine and in social work, in nursing, whoever deals with this problem had an enormous effect. And it is really getting extremely rare to find a mother who does not know

about lead at the very first time you see her with her child, whether the child is six weeks of age or one year of age or two years of age. It is very important, the whole matter of education.

I think another important advance has been the interest of the parent herself or himself in trying to prevent lead intoxication just by simply calling the health department, having the health department to send out somebody to inspect the house, because they are well aware of the problem and they see paint flaking off the wall and they just don't want their youngsters to become intoxicated. And we have many instances in Philadelphia where this is a reality. I think it's in the true spirit of prevention.

So these represent some of the advances that perhaps does contribute to the dropping incidence of encephalopathy and severe neurologic handicaps over the past 10 years.

Now, what about the potentials for the future in the way of eradication? Let me tell you about a little experience that I have had. It's

been very rewarding over the past three years -- I don't know that many of you know of this organization -- but there is an organization in Philadelphia called "The Coalition Against Lead Intoxication." And it's a very effective group. It's a group made up of community people. Mr. Jonathan Stein, who apparently won't be here today, a very able lawyer, myself and formerly another doctor was involved. And I think the emergence of this group tells us something about action. After all, what can you as an only individual do about lead? It's an enormous problem, has so many implications. How can you move a city or move the government or move large groups to get ahold of this and do something about it?

Well, this small group made up of maybe 12, sometimes more people than that has made an enormous difference in Philadelphia. The City Health Department in Philadelphia is basically charged with dealing with the lead scene in Philadelphia, and I think that institutions have a way of stagnating and getting into some degree of trouble. They sometimes find themselves in a rut,

even with well-meaning, very good people in institutions, I think as they become more bureaucratic they do begin to stagnate and they do need a little help from citizens on the outside. And this is essentially what this coalition has attempted to do. This coalition is made up of people who are extremely knowledgeable about the problem of lead. And no one individual in that group can do very much with respect to lead, but when they come together collectively, they can move a huge municipal institution. And I think that is really what we need to do today, is to move the people and the groups that have the basic responsibility for effecting a change.

And I am pleased to say in public that the City Health Department has really exposed themselves to the public. I think, too, in this day and age, with hostile groups throughout the country, this is very admirable. And the City Health Department in Philadelphia has been willing to do that, and believe me, it's an exposure, because when we go in we are not really that pleasant with them. It's a knock-down, drag-out fight, and we deal with all issues

of lead in the City of Philadelphia, whether it's medical, whether it has to do with the law, whether it has to do with the house.

Very recently we have challenged their whole approach on getting into the house. Formerly you had to demonstrate that a child was actually poisoned before you were allowed to go into the house and get the paint off the walls. Well, that is absurd. Well, now, with the change in attitude that 40 micrograms per cent is sufficient information to allow you to go in the house, because that is a health hazard, 40 micrograms per cent is a level where the child probably will have no demonstrable lead effect.

Now, you can go into the house when the child has 40 micrograms per cent. But we have said to the City that that isn't enough. Even that is not enough. What constitutes a health hazard? Every house with lead on the walls constitutes a health hazard. It's a potential health hazard, whether there is a child that lives there or not; that is a potential health hazard and demands an

attack, even in the absence of a child.

And one could easily argue this point, because if you examine the areas where you see a lot of these cases, you will find the mobility of the population is enormous. And one day there may be adults living in this house where paint is flaking off the walls. I can predict that within four or six months, probably a year, there will be a family with small children in that house.

So that all these houses of which there are probably about 30 and a half million houses that were built well before 1939 or 1940 with this lead on the walls, all these houses are potentially dangerous. So that we have suggested to them that they must get in there before children run around those houses, because they are potential hazards. And we have insisted, without success yet, for such things that the sale of a house itself should have as a contingency the inspection of the walls.

In the movement of a new tenant in the house, it should have as a contingency the inspection of the walls, and the walls should be safe

before either one is consummated.

And I think that while we still are fighting the City Health Department, it illustrates a methodology or strategy.

Now, we have been very pleased that the City Health Department has been willing to do this. They have laid themselves open to the public. They have demonstrated that they are sensitive to the public. There are other problems in the strategy. And that is how I view it. It's a problem in the strategy. It's a problem of political strategy, and in many cities and federal government, it's a problem of economic strategy.

In a city like Philadelphia, and I would suspect in other cities, unfortunately, the other people and other groups do not lay themselves open to confrontation, for instance, the City Council or the Mayor, if you cannot get to these people, then it's going to be very difficult to totally effect a change within the city. And we must look for strategies to develop some way of having a direct confrontation or a direct altercation, if you will,

or whatever is necessary to change these people in their attitudes about the problem of lead.

We also, I think, must do this on the federal and state level. There are a whole host of bills now before Congress in the State of Pennsylvania dealing with lead. How much lead can be put into paint, how aggressively we will go after the houses, how much money will be spent, etc., etc. If we are going to make any changes whatsoever, we have to take lessons from some groups that have done a superb job, such as the people who are interested in sickle cell anemia. I think they were very instrumental in changing the attitude and sometimes it takes a long time, but we have to accept this perhaps, but we have to keep working at it. It took them quite a while before the attitude was changed on the federal and state level about sickle cell anemia, and now they are just pouring the money out all over the place. And if you want to do something about sickle cell anemia, all you have to do is get in touch with them and there is a good chance you will get some funds.

You could beat your head against the wall ten years ago and you wouldn't get any money from them. It's an in-thing now. It's an in-thing after a lot of lobbying and a lot of coming together and a lot of haranguing them and arguing to the point and not giving up. Other people have done this and people are interested in cystic fibrosis.

This disease is such a rare disease that nobody even sees it, but people have gotten huge sums of money to work on the problem of fennel Ketterine urea, because of the lobbying effect. And I think we have to do this as well now with lead intoxication. We can scream it's a salient epidemic and there are 25 per cent of the youngsters who get it. We have this problem right now.

Apparently this is just falling on deaf ears. It's a crisis, etc. These words just lose their meaning. We have to understand and appreciate today the movement to eradicate this problem. And I will only be satisfied when we get to this point of total eradication involving politics and economics.

Well, these are some random thoughts that I wanted to share with you this morning. Let me leave you with one other thought, because you are all going back to somewhere, your own homes and your own communities. It's been very well documented and a very well-known fact today that in cities where they have marshalled very aggressive programs, they have made a difference. They have ferreted out youngsters who have the problem. They have dealt with these cases in the usual, medical way. They have definitely dropped the incidence of encephalopathy and neurologic handicaps and they have definitely made some change in the environmental scene. And I think that is a good lesson from the past, because if you don't have such a program, where you live and you live in a highly urbanized area, low-income area, part of the urbanized area, old houses, paint flaking off the walls, then you are residing in an area where there are definite cases of youngsters with high lead levels. And from this experience of groups that have gone in and done what they could within their own limitations, they have adequately demonstrated that they have made some

degree of inroads in this problem. There is a long way to go, but they definitely have changed the scene somewhat.

So I would leave you with a thought that if you are looking for a cause, you have a cause right now. And I really do believe that if you go back and get out there and accept this as a true cause and work for it and do something about it, you will make some major changes in your own community.

Let me end by saying that I think that we have come to a time where aside from local efforts there must be some national effort to effect a federal scene that is now cogitating and thinking about what can we do about this lead problem.

I think that this is a time when we should organize. For those of you who are interested, I am sure there are ways and means of organizing, and I am certain that this coalition which is extremely active in Philadelphia, would be more than happy to join with any group throughout the country in this effort. And I am sure that they will be equally pleased to act as the spearhead group.

Thank you very much.

DR. JOHNSON: Dr. Elizabeth Craven is this morning's second speaker, and she will be speaking to you on screening for lead poisoning or lead levels.

She graduated from New York Medical College in 1961, was an intern at the Bryn Mawr Hospital. She took her residence in pediatrics from St. Christopher's Hospital and then had a fellowship in neurology in St. Christopher's Hospital, following which she spent five years at the Elwyn Institute for the Mentally and Emotionally Disturbed Children. She was Board-certified in pediatrics in 1967 and has been for the past two or more years director of the outpatient department at the Wilmington Medical Center. Dr. Craven.

(Dr. Craven presented her talk at this time.)

DR. JOHNSON: We are running a little late, but in view of the problem to be discussed, Dr. Vincent Guinee will be allowed his full time, and the question and answer period may run into the coffee break.

As you probably do not know, Dr. Guinee basically is an internist, but we pediatricians are pretty jolly good fellows and allow people from other disciplines to join us when we have a problem.

He received his medical degree from the Cornell University Medical College and then took a straight medical internship at St. Vincent's Hospital in New York City and then residency training in medicine at both St. Vincent's Hospital and Bellevue and Memorial Hospitals. Also took a residency in public health through the New York City Department of Health. Subsequently received a master's in public health from Harvard School of Public Health. And is Board-qualified in internal medicine and Board-certified in public health. Dr. Guinee is going to speak to us this morning on the New York experience.

DR. GUINEE: An internist is always willing to come and be a troublemaker among pediatricians. It's a real tough thing for me to have to get in the way of a coffee break.

I am going to talk about a program that we are doing and discuss problems we have, problems that if you are getting into a program, you are going to have, and the arguments you are going to get into. Overall what I will do is talk a little bit about New York's problem, our program, our results, some of the research, and briefly touch on some of the potentially controversial words that are associated with lead poisoning.

New York City has completed two years of experience in operation of an intensive lead poisoning control program. During 1970-71 over 200,000 lead poisoning tests were performed and 4,574 children were identified with blood lead levels of 60 micrograms or higher. This is a definition of a case in New York City. Inspection of the home environments where children with lead poisoning resided resulted in the Health Department ordering

repairs in 3500 dwellings. These repairs were performed by landlords about one out of six times or they were assigned to assist the housing and development administration in the emergency repairs program. Despite this effort we estimate that we have 5,000 children in New York City with levels of 60 micrograms or higher that we have yet to contact.

All paint is a formidable source of exposure to lead to children in New York City. We estimate we have 450,000 apartment units that are in such a state of disrepair that a child living in them will be exposed to the hazard of lead paint poisoning. Approximately 120,000 children are living in these buildings. In the New York City Health Code it banned the use of lead paint on interior surfaces in 1959. However, most of our deteriorating houses stock was built before World War II.

In January 1970 New York City Health Department created the Bureau of Lead Poisoning Control. The Bureau's approach has been to seek out and attempt to protect the child who is most likely to suffer from lead poisoning. We recognize that in the long run the

long-term solution will be to replace deteriorating housing of the inner city. When a child is found to have a blood lead level of 60 micrograms, the Health Department notifies the physician submitting the specimen, and a nurse and sanitarian visit the home and plan for medical supervision and attempt to determine the source of lead available to the child. If the Health Department laboratory analysis finds paint samples with more than 1 per cent paint control, the owner of the builder is ordered to correct the condition within five days. If he fails to comply, the work is done by the City's emergency repair program.

When apartments have children with elevated blood levels, are inspected, 7 per cent are found to be without evidence of deterioration, without apparent exposure sites. Of the remaining apartments where paint samples are taken, about 80 per cent have some high lead content paint identified.

We do know that in some instances the child was exposed to other households where he may be with a relative or babysitter part of the day. Our

sanitarian attempts to ascertain this, and we check all apartments where the child spends a good portion of his day.

When we speak of a case of lead poisoning, a case as the connotation of symptoms and poisoning has a connotation of damage, and neither is necessarily true. However, we have been unable to find any other verbal designation which describes the situation more succinctly, so this is what we need. New York City's current definition of a case is the child who, on a single occasion, has a blood lead level of 60 micrograms per 100 milliliters or greater. These children as a rule do not have symptoms which can be attributed to lead intoxication. We feel that this level does indicate that the child has access to lead in his environment and is taking it into his system. But the situation isn't unusual. It can be seen on the tabulation of our case reports. In 1969 727 cases. In 1970 2,649 cases. In 1971 1,925 cases.

The number of cases reported reflects our efforts, whereas, roughly 10,000 blood tests were done in 1969, over 80,000 were performed in 1970, and

it was a steady testing program of approximately 10,000 blood samples a month in 1971.

Although, more cases became apparent in the summer months, a significant number of cases were uncovered by screening throughout the year. Variations from month to month may be influenced by the manner of screening, age of the children being screened, the neighborhood and the season.

Aside from finding cases and repairing buildings, we have been doing operational research and epidemiology research, and in the field that is important not only to guide our own programs, but also to focus attention on the areas that need to have special attention.

It would seem that the incidence of lead poisoning cases follows a seasonal pattern, the largest number being uncovered in the summer months. We also noticed that more cases of lead poisoning occur in black children more than any other group, because of the factor of age and race might effect the seasonal incidence.

Lead poisoning in 2-year-old children, black and Puerto Rican, a significant finding emerged. 9 per cent of 2-year-old black children in the poor neighborhoods of New York were found to have blood lead levels of 60 micrograms or greater during last fall. And 9 per cent incidence in 2-year-old black children last July. This percentage is based on the first test of a child. It would be higher if a second blood test were taken.

During the same period of time, 3 per cent of Puerto Rican children had lead levels of 60 micrograms or greater. These statistics, looking at the incidence of cases over the course of the entire year of 1971, are based on large numbers. Roughly 5,000 black children and 5,000 Puerto Rican children in those eight groups.

In another study, in an effort to protect future generations of children from lead base paint, we have undertaken a survey to determine the lead content of paint sold for use on interior surfaces today. The startling results of this survey showed that the manufacturer of lead-based interior

paint is still a problem. And the New York City Health Code has required lead content warnings for interior paint since 1959. It states that if a paint contains more than 1 per cent lead, it must bear a label stating, "Contains lead, harmful if eaten, do not apply on toys, furniture or exterior surfaces which may be chewed by children."

Despite the existence of this section of the health code, for over a decade, the Bureau of Lead Poisoning Control found that paints manufactured by 25 of 76 manufacturers included in our survey did not comply. In one instance and in fact a number of instances, but in one particular instance, the label stated, "Safe for cribs and playpens," and had a lead content of 9 and a half per cent. So everybody thinks that the problem like that about playpens and cribs vanished at the turn of the century. It's very, very possible, it still is very possible today for a person to go out to his local paint store, buy a can of paint that says, "Safe for cribs," put it on and be putting on 9 and a half to 16 per cent in some of the instances, up to 16 per cent lead content on a can of paint that

says it's safe to put on a crib.

One of the other studies which we did, believe it or not, it's difficult to find in the literature the actual connection between lead paint on the wall and children becoming cases. We have looked at this in terms of children who have paint chips on their X-ray, and when we went back and looked at the homes, we would find that there was lead on the walls. But we thought it would be a good idea to go back and check and find out whether the neighborhood children were living in the same place, the same household or adjoining households of the lead case, whether or not they also had lead paint on the walls. So to investigate this question, we undertook a study in which apartments of affected children were compared with apartments of a controlled group. The affected group consisted of one, 2 and 3-year-old children with blood levels of 60 micrograms or higher. The controlled group was matched by age and had blood lead levels of 10 or 20 micrograms.

The result of the apartment inspections showed that in only four of 135 cases did

the sanitarian find an apartment with intact interior surfaces, indicating no cause for action. So when you had a case in only four instances of this group where they were able to find a completely intact apartment. In contrast, 27 per cent of the apartments in the controlled group were in good condition.

If peeling paint was found, the paint samples containing illegal amounts of lead, 80 per cent of the time in the apartment of the affected children and 50 per cent of the time in the apartments of the controlled. Overall, a potential source of lead within the apartment was uncovered in 76 per cent of the case children and 37 per cent of the controlled groups.

Another way of saying this is that if the controlled group who was tested in the same neighborhood, that child was more likely to have an apartment whose walls were intact, and if the walls were chipping, the paint was less likely to contain lead, and also the controlled child was more likely to live in some type of project, which is better housing, almost by definition.

Now, some of the words we come in contact with in lead poisoning, one, pica, and I guess it depends on how much Latin and where you took your Latin whether you call it pica or pica. By definition, lead poisoning must be associated with pica and yet paradoxically, when the history of pica was used as case finding mechanisms, more cases were lost than were found.

Since a number of cases had been uncovered by eliciting this history, it was easy to see how this gradually became accepted as a good screening method and what was not appreciated was the large number of false positives, children with lead poisoning but whose mothers did not or would not volunteer a history of pica in their children. And it's easy to see how a history of pica could be missed. First it might not be considered good behavior, and we are asking the mother to tell us her child is misbehaving. Second, it follows from this that a mother would allow her children to indulge in this habit that she might be a bad mother. And third, and probably more likely than the previous two, the

children are apt to engage in this habit when adults aren't around. So we have given up discussing pica in New York from the point of view of screening. Although we have used it in our television presentations and discussed lead poisoning in general, but pica is not used in any way to screen children in New York City. What we do is elicit an information category of a child living in a deteriorating house. That is when you screen. We have attempted to remove guilt from the mother of the potentially lead-poisoned child. A child can eat paint chips in a couple of minutes. And every two-year-old child is going to be outside of the sight of the mother for a couple of minutes. And by keeping this reality in mind, we don't force a mother to put her reputation as a mother on the line when we ask her to bring her child in to be tested. The last thing we want is if a mother brings her child in for testing that they may be proven scientifically to be a bad mother.

Another word associated with lead poisoning, "a case." The more you review statistics from year to year and city to city, epidemiologic patterns are portrayed which differ more in definition

than in substance. The study of lead poisoning had been hampered by and obscured by semantics. When we speak of a case we are talking about 60 micrograms. Another city may refer to a case as 50. The Surgeon General may at some point want to call 40 a case.

Now, we have taken 60 micrograms as an apparently safe cut-off point, and this is what we call a case. If we recognize 60 as a safe level, this is acceptable. If we regard 60 as an area of damage, it is not acceptable.

In deciding whether 60 is damage or not, it depends on how often we should check children with 40, how often should they be retested, and we should keep in mind what we are retesting for. The possibility that a child may reach the other side of an administrative cut-off point or that the child may be in grave danger of having permanent damage.

Another term that is even less well-defined is "recurrent." In the literature, investigators have spoken of almost 100 per cent permanent damage resulting from a recurrence of lead poisoning. It might be imagined this refers to symptomatic

recurrence in most instances.

Most often with a definite neurologic component, permanent damage cannot now be predicted on the basis of a fluctuation of a blood level. Though, we administratively may call this a recurrent because we have several blood levels. The definition that will distinguish between an asymptomatic and harmless recurrence and a fluctuation of blood level which may indicate that a child is going to have in a short period of time permanent damage, the definition between these various terms and these various levels has not been determined.

And another word, "re-exposure." When a child returns to a hospital with an elevated blood lead level and after treatment may have brought down that blood lead level, he goes home. He comes back and he is termed a "re-exposure." The connotation of re-exposure suggests an external, causal factor in the home environment that still harbors lead. Yet it's very possible that at least in some instances the source of the lead has been the child's own tissues. Treatment cleanses the blood

of its lead, which is soon replenished by the process of equilibration with soft tissue and bone. The connotation the scientific community sees in the word, "re-exposure," will determine the possible preventive and therapeutic action to be taken under consideration.

In New York City, if I had to single out what our biggest problem has been, it probably has been the introduction of new technology -- every test for the child, macro blood test, micro blood test, urine test, test for the house, screening on the spot, paint chips being brought to the lab, X-ray, fluorescent analyzers that can give you a readout, various methods of fixing the house, burn off the paint, plaster it, wallboard. You will be deluged with new paints which may assimilate plastic, new paints which are bitter and, therefore, are felt to repel children.

No one that I have met yet knows the answers on all of these. And when we come up with each one of them, we just call everybody we know and try to come up with an educated approach to the thing.

The biggest advantage we have in the

program is that emergency repair can get the repairs done. And I think it's very important to have a mechanism in a community for housing repair. If you don't repair the places where you find lead, community involvement will disappear and the program will grind to a halt.

Well, what I have presented this morning, I hope is enough to at least give you the impression that we are up to our ears, if not over our head, in work on lead poisoning. Whatever the area, community relations, computers, epidemiology, or paint, our staff in New York will be happy to work with you in your program to get at some of the answers of the lead poisoning problem. Thank you.

DR. JOHNSON: I would ask that each of the three participants, if they would come to the front of the stage, please.

As we start the question and answer period, I would repeat that I would like to have you stand and direct your question to the participant that you wish to have answer it, and if you will state your name and the organization with which you

are associated. We will now entertain questions from the audience.

MRS. CLOWER: Mrs. Clower, from the Newark-Dover, Kent County, Health Unit, Board of Health. This may be a stupid question. The stupid question I would like to ask is why does lead poisoning have a seasonal up and down, Dr. Guinee?

DR. GUINEE: The stupid question still hasn't been answered by the medical profession. The question was why does elevated lead levels seem to occur more in the summer than in the other times during the year.

What we did when we zeroed in on two-year-old black children in New York, for instance, was attempt to get away from the possibility that somehow or other we might be screening different ages or different races or different neighborhoods in the fall versus the spring versus the summer, something like that. There is no question about it, however, that not only do you get more cases, but if you look at an individual group of children, that the levels, well, in July of 1971, the two-year-old black child

was 9 per cent, had a level of 60. In January of that year it was 3 per cent. So you have that much of a fluctuation.

The best guess is that it's tied up to sunlight and the metabolic way that lead is handled, something in the calcium-lead kind of situation in the body. It's not felt to be related to exposure of the child to other sources of lead during the summertime, for instance, like outdoor paint.

BARBARA CASSANOVAS: Barbara Cassanovas, Public Health Nurse. I would like to know what happened to the manufacturers of the paint that was found on the market with high lead concentrations?

DR. GUINEE: We do a couple of things with that. I think almost every health department should do their own survey. What we do in New York City is inform the painters or the paint manufacturers that they are not only going against our own health code, but also the voluntary industries standard which the paint industry had established in 1955.

We say they can't sell it in New York. If they continue to sell it in New York, we embargo it.

We are doing periodic surveys and we will probably, if embargoes don't work, we will probably take stronger actions.

A VOICE: Community Health Department. You mentioned your emergency repair group. Do you put a tax lien against the property after or do you just make the repair at crossroad city?

DR. GUINEE: It is hoped and this is pretty hopeful, that at some time in the future that some of this money may be recouped from the landlord one way or another. But what we have done is get the repairs doen right away and worry about where the money is going to be coming from and a court fight later on.

This is different from what it was prior to 1970, when we had to take the landlords to court, and it was a very long procedure. The child grew up before the case was decided.

A VOICE: How many repair groups do you have, doctor?

DR. GUINEE: This is through the -- well, we started off having repair shops. When we found this didn't handle it, as well as it should, we went to outside contracting. The cost for an apartment, we only fix where we find lead. So, in other words, if you have a crumbling wall, and we haven't been able to find lead there, we don't fix it. You know you have a problem here. This is one of our worst public relations problems, because the reporter can walk in and say, look, that looks just as bad as it did before. We say, we're sorry, we can't find lead. But there is alabaster here, and you have to strike a difference between lead programs and urban renewal. And we are trying to, although we are in favor of urban renewal, but our charge is to protect the child from lead while somebody else attempts to get urban renewal working.

DR. CARPENTER: Dr. Carpenter, Kent Health Department. Does the City pay for the service at the present time?

DR. GUINEE: Yes.

DR. POMLEY: Dr. Pomly, Medical Examiner's Office, Wilmington, Delaware. My question is addressed to Dr. Sussman and Dr. Guinea. In micro sampling of children in blood, have you had or do you have any technical problem in collecting the samples and I guess you should know whether you duplicate the samples or just one sample per child and whether you do micro sampling, and with micro sampling, do you go back with the case if the case is over 60 micrograms, then you do a micro sampling?

DR. SUSSMAN: We do micro sampling and all the blood leads are sent to a private laboratory that has been doing it gratis for the City of Philadelphia. Their errors have been considerable. It's apparently a very difficult technique in the laboratory, and we do a lot of repeats after we get a level back, particularly when it's up over 40. Then we do repeats very quickly.

DR. POMLY: Is it micro samples?

DR. SUSSMAN: No, it's macro samples, 5 cc's of blood. We do not use a micro technique in

Philadelphia. I do see somebody from the Philadelphia City Health Department here.

ELIZABETH McCANN: Elizabeth McCann, Utica City Health Department. I had the experience this week of sending a blood sample of a 4-year-old black child took on May 2nd and coming back 44 macrograms and repeating at the end of the month, and we received a blood sample level of 90 micrograms. There has been no follow-up at this time, but would you say this was a lab error or would this be possible?

DR. SUSSMAN: The odds are it's a lab error.

JOHN BASKIN: John Baskin, City of Philadelphia Health Department. My question ties in very closely with the last two. Looking at the report that one doctor presented to us a wide range in variations in blood test results of numerous like samples that I take, and the comments from the other people regarding the number of blood tests and the wide variations and my experiences are the same.

My question is this, what combination

of symptoms and/or blood level should treatment begin and how many repeat determinations must be made before you have proof positive that you either want to begin some form of treatment or some form of environmental control?

DR. SUSSMAN: I would say a level of 40 and above should call for an environmental.

MR. BASKIN: How many times must you get that 40 or must you accept your first level of 40?

DR. SUSSMAN: Yes.

DR. GUINEE: I think one of the most serious questions you are raising is how many falses or positives or false negatives must be get on screening tests? And at least from our experience here we have the greatest difficulty in the micro tests.

DR. SUSSMAN: I would just like to emphasize once again that the approach should center around the very aggressive environmental attack, whether it's 60 or 80, and if you want to stand around arguing whether those children should be treated with drugs, that is one thing, but unless you couple this

discussion with what are you going to do about the environment, you have lost a very important facet of the approach to the case. So anything over 40 to us suggests that the child has been getting into lead other than from normal sources, such as food and air.

DR. GUINEE: I think it might be worthwhile to point out the fact that we do have a difference in terms of 40 and 60 as far as when we are going to act on the case. One of the problems that we have, for instance, in New York City, if we went down to a 40 level for fixing apartments, we would go from a level of 2,000 cases to a level of 20,000 cases.

Our budget currently is two million dollars, and our repair budget is something like a million dollars. So you can see if we multiply this or much of these factors by a factor of 10, it can get expensive.

MR. CARNEY: Jack Carney from the Wilmington Public School. Is there a formal screening program of school-age children in Philadelphia or New York, and if so, what is the nature of it?

DR. SUSSMAN: To the best of my knowledge, there is no normal screening program for school-age children. There is a very aggressive program underway now in the model cities neighborhood which amounts to the so-called lead belt, certainly the lead belt in Philadelphia, and all children up to the age of 6 are being screened, using the ALAD as a screening test. These go from door to door and they screen all children in that age group.

DR. GUINEE: In New York City, we do not have a school program. There are several school areas that may have 2 per cent cases in some small areas of Brooklyn, but basically 80 per cent of our cases are going to be between age one and four, and this is where we concentrate on them.

I think the second point in terms of age is not only -- that is where most of the cases are, but probably that is the best time to catch a case in terms of the neurologic and other damage.

ROBERTA LEE: Roberta Lee, New Castle County Public Health Nurse.

Question number one is with the cribs

that have been found to have been painted with lead paints. Are they made in the United States or are they imported?

Question number two, have you done any screening in, well, baby cribs or pediatric clinics at the hospital for these children at early ages under 6 years?

DR. GUINEE: The problem I had with the cribs was the fact that paints that were being sold for use on cribs may have high levels of lead. So, in other words, when a crib is reused, when the next baby comes and they repaint the crib, that is where we are going to get in trouble.

We have our screening taking place in the hospitals, district health centers, mobile units, living rooms. Almost anyplace that we can screen or wherever pediatricians are willing to do a venae puncture or lab technicians are willing to do a venae puncture.

RON JACKSON: Ron Jackson, Johns Hopkins Hospital. Do you use escrow as a means of getting the landlord to change a house?

DR. GUINEE: As far as we are concerned, if one out of six landlords will do the repairs on their own, and probably because they figure that it is going to cost them more if we do them, and the other five out of six we go in and do the repairs and the housing authority has to try to get money back from the landlord someday. We have let them worry about it.

FRED LIPSCHITZ: Fred Lipschitz, University of Pennsylvania and Children's Hospital of Philadelphia. I would like to make an observation on the screening tests available for lead poisoning now. There are two tests that all evidence points to are probably much better than the blood lead determinations, more accurate. These being the ALAD test and more recently the free arethrotite parafin test. Pediatric research in Washington last week, I think these tests offer a more rapid, simpler and cheaper test in both cases for doing blood lead determinations. And I think that these tests should be implemented on a much wider scale, and I think it would be a substantial value and increasing the same

amount of money, the number of tests that could be made for blood lead determinations.

DR. GUINEE: On the FEP paper, I am one of the co-authors with Dr. Pimelli on that. There are many tests that are right on the horizon, but they are not available immediately for use in mass screening. And as I mentioned, one of the problems which we have is implementing new technology.

It's very often possible, for instance, in a hospital setting to take a fresh blood sample from somebody in the clinic, bring it to the lab and have it done, and it works out very well, and the time from the time you take it to the time you do the test may be an hour or two. The same kind of test that is going to be used on mass screening, however, you have to make sure there is no factor of deterioration or some other problem that creeps in in 48 hours or 72 hours between the time you draw the blood and the time the test is done. So that many of these tests are very good. But they in general could not be used tomorrow if we cranked them into our system.

FRED LIPSCHITZ: Dr. Pimelli

announced at the conference that it could be done on a spot paper test which could be sent through the mail and remain stable for a long period of time.

DR. GUINEE: It could be done. He was working with Dr. David Dow of the New York City laboratories to perfect it, but it's not now available. I think it's a question of semantics in terms of exactly when it becomes a reality.

ELLEN SKELIMAN: Ellen Skellman, Haverford Hospital. I would like to know, my question is to Dr. Guinee, your techniques for repair. Are they costly and just what do they repair?

DR. GUINEE: The repairs that we do average out to \$450.00 an apartment. We fix surfaces where we find lead paint at a level greater than 1 per cent. We do the house of the child or the apartment of the child. Any other apartments where the child may have been staying and the hallways in the immediate area.

ELLEN SKELLMAN: What do you do, that is what I want to know?

DR. GUINEE: Wallboard is put up and

the window frames and door frames are replaced, because it's very difficult to, it costs more to take the lead paint off than it would be to just replace them, and then painting is done.

One of the reasons for wallboard floor to ceiling is that we did say that it could be up to four feet and then some other kind of material put up to the ceiling. It was found to be cheaper just to put the wallboard in in one setting.

DR. JOHNSON: It's now eight minutes of 11:00. I ask your courtesy in being back here promptly at five minutes past 11:00. I wish to thank the participants very much for their presentations.

(Coffee break from 10:52 o'clock a.m. until 11:05 o'clock a.m.)

AFTER RECESS

DR. JOHNSON: If you will please be seated, and we will start the second half of this morning's program. Our fourth speaker this morning

is Dr. Julian Chisolm, Jr. Any of those in the audience who have been associated with the problem of lead poisoning certainly know the work that has been done by this gentleman, both on a clinical basis as well as on a research basis. Dr. Chisolm graduated from Johns Hopkins University of Medicine in 1946 and then spent five years in residency training both at Johns Hopkins Hospital as well as Baby's Hospital in New York City. After a turn at being in the service he returned to start basic research on the problem of lead and lead poisoning in 1952, which is 20 years ago. Since that time he has been carrying out this work at Johns Hopkins and is presently associate professor of pediatrics at Johns Hopkins and associate chief of pediatrics at the Baltimore City Hospital. It's a great pleasure for me to introduce to you Dr. Chisolm.

(Dr. Chisolm gave his talk, not taken by stenographer.)

DR. JOHNSON: The second speaker is Dr. Henrietta Sachs, who will speak to us about ambulatory therapy of lead poisoning.

She received her MD from the University of Illinois. She then was an intern at Cook County Hospital and further did her pediatric residency at the same institution. She has been with the Chicago Board of Health for the past eight years and was instrumental in setting up the lead clinic six years ago, of which she has been director for those past six years. Dr. Sachs.

(Dr. Sachs gave her talk, not taken by stenographer.)

DR. JOHNSON: Dr. Barbara Rose will be the last speaker for this morning's session. I would point out to you in this day of women's lib that there were three female and three male panelists. Also in trying to strike an appropriate compromise, Dr. Rose likewise is an internist by training.

She received her medical degree from

McGill; her internship was accomplished at Royal Victory Hospital where she subsequently took her residency in internal medicine and subsequently received her master's of public health at John Hopkins Hospital and is Board-certified in preventive medicine. She is presently deputy health officer in the State Board of Health, City of Wilmington and New Castle County.

Dr. Rose will speak to us about the Wilmington experience. Dr. Rose.

(Dr. Rose gave her talk, not transcribed by stenographer.)

DR. JOHNSON: Again, I would ask each of the participants to come to the front for the question and answer period.

ROSE GRAHAM: Rose Graham, Nursing School of Wilmington. I am interested in the study you did in Wilmington, Dr. Rose. Were the day care centers found to produce environmental hazards or were the hazards primarily in the homes?

DR. ROSE: I did go into the day care center and we did find lead in the paint in the day care centers, yes.

MISS GRAHAM: How about the number of homes in relation to this?

DR. ROSE: We ended up with -- we referred 24 children from that program for diagnostic follow-up. And I think they recommended 12 homes because they were siblings. Four of them, homes that were specific areas of contamination, which could be corrected easily and they were corrected. Four of them, we didn't think that there was a risk in the home. And four of them, the homes had been corrected.

MR. SANG: Norman Sang, New Orange Medical Center. Dr. Chisolm and Dr. Sachs, is there any evidence that the oral injection of depenicilimine enhances the absorption of lead from the GI tract?

DR. CHISOLM: In the first place for the DPM to be effective orally it has to be given on an empty stomach. The question cannot be answered directly with respect to lead. It has, however, been studied in respect to copper. And now it's primarily

a treatment for Wilson's disease and the evidence there is that it does not increase the absorption of copper in the gastrointestinal tract, but it has not been studied in specific relation to lead.

Personally I don't get anywhere, I think a child still is ingesting the lead.

DR. GREY: Dr. Grey of the Division of Physical Health. One point of clarification of the paper that Dr. Rose gave. What she stated was correct with respect to the \$85,000.00 we requested for funds for carrying on a lead program. It was not included in the budget bill. However, the budget bill has not yet been acted upon, but if there is a ground swell of enthusiasm among this group to speak to the legislature with respect to getting this into the budget bill, there is still time to do that. So, although it's not in the budget bill at this time, there is a possibility of getting it back.

DR. AVERTE: Dr. Averte, from Prince George County, Maryland. I would like to ask Dr. Chisolm about his experience with the use of micro methods in screening.

DR. CHISOLM: Well, first let me answer this. Doctor may mention that there is a tremendous technological explosion in this area. Second, I would say that there is a great deal of art involved in doing the variety of tests that are done for lead; and third, I would say that personally I have not had very good luck myself in getting reproducibility with the technique.

Now, this is connected with lead. One of the bits of data I showed you, however, on measuring protophorphines that is quite reproducible and is biological in nature rather than analytical in nature.

DR. WHITT: Dr. Whitt, Philadelphia. To Dr. Chisolm. Would it be a better idea to use a test such as the ALAD with which presumably collects the effects of poisoning in the system by lead as a screening test or would you recommend we use macrogram?

DR. JOHNSON: The question is, if I understood it, would it be better to do screening with ALAD tests, which reflects concentrations as opposed

to doing just blood levels. Is that correct, sir?

DR. WHITT: Which reflects the effect of poisoning.

DR. CHISOLM: I think you are referring to urinary ALA tests. Those really are not very helpful, because of the rather wide concentrations. And this has wide variations. However, Ostes' did present a paper at the recent APSSPR meeting suggesting that this might have a relationship with the chelatable lead and further studies indicate that that is so. And I imagine that becomes an appropriate measure. I think a better answer to your question is this; in industry they have struggled with this for a number of years, and I think they have come to the conclusion that in monitoring individuals at risk you really can't depend upon a single test; that you have to have two, and in general, I am referring now to the European industrial literature. In general they use a blood lead combined, they use ALA in the urine. The circumstances are different, but the point -- the important point is that in the monitoring of the individuals known to be a high risk and those selected

out that you really do need two parameters by which to monitor these individuals. I hope that will, in part, answer your question.

JACK CARNEY: I would like to ask Dr. Sachs, what is the source of cleansing for the program in the City; is it City, State, Federal government or what?

DR. SACHS: We use City funds with a considerable assistance from the Federal Government. In funds used from an internal and infant care program from the children and youth, the 601 program and whatever funds the City has available.

(Unidentified voice, unable to hear.)

DR. SACHS: I have no set criteria for hospitalizing. First, of course, any child who has severe symptoms of lead poisoning would certainly go into the hospital. We find that if the symptoms are minimal, the child is vomiting occasionally, is a little drowsy, but he is responsive when we examine him in the clinic. We will treat him as an outpatient. We have to be confident that the mother is able to take care of the child and will bring him in regularly.

Actually we have had excellent success on having the mothers bring the children back. We have rarely had a case over the years where the child did not come in daily for his five days of treatment. We will hospitalize a child if we feel the mother is not giving the child the care it should have. If it has come in several times with a positive abdomen, that is, particles in the abdomen, and the blood lead does not go down, we will hospitalize that child even if the blood lead is not particularly high, say, 70, 80, 90 micrograms. The child is not sick at all. We will take him out of the home and keep him out as long as we can until the mother has moved or until the apartment has been completely repaired.

DR. WEST: Dr. West, Charleston.

I would like to ask Dr. Sachs about her experience with depenicilimine. I was wondering if you ever used it without previous EDTA therapy, one; and also, how do you monitor a drug when you are administering it; and do you administer it under an IND permission to use the drug?

DR. SACHS: No. We have never

received or requested that permission, and we have had the penicilimine available to use for at least five years.

We do give it in some children whose blood leads are in the low 60's or between 50 and 60 micrograms without having given them a course of EDTA previously. Most of the children who receive it, however, have been on EDTA and then we taper them off with penicilimine.

DR. WEST: Do you monitor them on a weekly or monthly intervals?

DR. SACHS: They come in every 28 days. They are given 28 capsules if they are on one-a-day. And they come in every 28 days for a repeat blood test. We ask them to bring in a 24-hour collection of urine if the mother can get it, so that we can examine the urine for lead output.

We find that, generally, most children on penicilimine, the lead output will be between 3 and 600 micrograms per liter daily.

DR. HARFAR: Dr. Harfar, Buffalo, New York. I am impressed with your ability to follow-

up the children well. Where is it in relation to the highrise community and what is unique about it?

DR. SACHS: That which is unique about it is that it's in a very old building which does belong to the city, so we don't have to pay any additional rent. We do have the facilities available to us since contagious disease is no longer as common as it was when I was a resident in that building. We have a whole unit of the building available to us for the clinic. It's rather centrally located in the city. There is access to it, although it does take time, because we have a very big city, it does take time for public transportation to get there.

MR. BAKER: Jim Baker, Wilmington. I would like to know, not specifically to anyone on the panel, will there be any transcript of all this technical language which I don't understand what anybody is talking about?

DR. JOHNSON: Yes, there will be.

MR. ROBINSON: Mr. Robinson from the Bureau of Poisoning Control in the City of New York. I was concerned about what Dr. Sachs mentioned

concerning treatment with EDTA and penicillamine. I was wondering, in the macrofasia treatment facilities in New York City, they do not treat or hospitalize children under 80 micrograms, whether or not those concerned that there would be damage to the kidneys of these children, and whether or not she had done any studies to that effect? I would also like to have Dr. Chisolm and the other doctor comment on her procedures in doing this kind of outpatient treatment.

DR. SACHS: Recently we have chosen to treat children with 50 micrograms, providing they have a repeat blood lead specimen in the 50's, say, two, three, sometimes four times and a positive EDTA mobilization test. Because we have seen children with early symptoms of lead poisoning in the high 50-60's and again, the 70's, and we feel it's a little dangerous to wait until they get to 80 micrograms. Therefore, I think that we are probably treating some children who don't possibly have to be treated if we waited for a while, perhaps the blood lead would go down by itself over a period of some months or a year, but we just feel a little safer in treating

them.

MR. ROBINSON: The other part of the question directed to you and to the other doctors was the possibility of damage to organs, whether or not you had --

DR. SACHS: We do a urinalysis on every child every time it comes in, and we have had the same results that Dr. Chisolm has had; we have not seen the type like obtained in the urine that is the presence of sugar and protein, unless the blood lead is quite high.

DR. CHISOLM: I think we used depenicilimine and we use these various chelating agents in much the same fashion, I would say. In general, it's the children who are very high, the high dosage, and to come down lower, you need a lesser dose of depenicilimine. In terms of follow-up, I usually follow them at least once a week for the first month, because a few reactions to depenicilimine that we have seen have occurred within the first month of administration. We do CBC's and urinalyses forever. So far as reactions to depenicilimine are

concerned, they have been encountered when the drug has been used in much larger doses than we are using it for lead intoxication.

MR. ROBINSON: What I would like to know is, like, when you are taking tests for any diseases and so forth, is there any way that you could, like, test for any other diseases?

DR. JOHNSON: If I interpret the question correctly, can you also do screening lead tests on a child who is having blood taken for another reason?

MR. ROBINSON: Yes.

DR. CHISOLM: Well, I think I have answered the question in several ways. Number one, routine tests do not really detect it. Number two, if you are going to collect specimens for lead, they must be in specially cleaned containers. You have to use special syringing, needles and plastic or glass tubes to collect for lead. So that you cannot collect a sample with ordinary equipment and then decide you want to do a lead determination on it. It will be worthless. You have to collect it in special

containers.

DR. ROSE: I wonder if the question might be to sickel cell screening. Is that what you are looking for?

MR. ROBINSON: Well, it could be, yes.

DR. CHISOLM: As long as it's in a container appropriate for lead, then you could use blood for any other purpose you want.

JOHN DISOLM: John Disolm, from Philadelphia. I think that question is particularly relevant, since I think there are probably -- there are increasing numbers of programs now aimed at kids in the early years, and, you know, if one could combine tests with another test in the same problem, you would probably make more efficient the screening program for various diseases. I think it's particularly relevant also, because right now there is an attempt to enforce a provision of the medical systems law, Title 19, which provides for comprehensive diagnosis and screening of all kinds in medical assistance families with a primary focus on preschool

kids. And this has been part of the Social Security Act for five years, but has been totally unenforced. Finally this past year there is now a regulation attempting to implement that. However, most states have not yet and probably Delaware is included, Pennsylvania is included, and most other states have not yet established these diagnostic and screening regulations. But the regulations themselves set the scheme for including lead poisoning, medical screening, sickel cell anemia, and whole host of diagnostic tools that are available. And, you know, they can all be done in one program with these separate sources of funding for the screening.

DR. JOHNSON: We will entertain two more questions from the audience.

MR. JACKSON: Ron Jackson, Philadelphia. I would like to ask Dr. Chisolm, will there be any follow-up on this program that you have gotten the data on to-date?

DR. CHISOLM: Well, it depends upon which group. I have followed a number of groups.

MR. JACKSON: At Johns Hopkins.

DR. CHISOLM: We did do some testing, but we have not been permitted to follow those children, the last group.

I have followed a number of other groups. I have followed some children for close to 20 years.

MISS SMITH: Marcell Smith, Coordinator in the City of Wilmington. I would like to direct my question to Dr. Chisolm as to what state of being the body is in before the lead poisoning after taking over the body before the mental retardation sets in?

DR. JOHNSON: If I interpret the question, can there be an estimation made at a certain lead determination in regards to the possibility of subsequent brain involvement, is that correct?

MISS SMITH: Right.

DR. CHISOLM: I don't think that anybody can really answer this question. What we can and what you have heard repeatedly is that the child has clinical illness, that he has nervous system

symptoms, that is attendant with very severe and obvious injury, but we do not know the level of which should tell, but possibly significant injury to the nervous system occurs. I might say, one reason we don't know it is because of technological limitations. We haven't been able to measure it, so nobody can answer your question.

DR. JOHNSON: I wish to thank the audience for their courteous attention and active participation in this morning's seminar. And I wish to also thank the last three speakers on today's seminar.

(Luncheon recess, from 12:15 o'clock p.m. until 1:20 o'clock p.m.)

AFTER RECESS

DR. McKUSICK: Good afternoon. I think we will start the afternoon program. Our moderator this afternoon will be Dr. Maurice Liebesman. Dr. Liebesman is a pediatrician in private practice in

the Wilmington area. He is also a member of the Delaware Charter of the American Academy of Pediatricians. Dr. Liebesman is our chairman of the committee on public information for our chapter, and I am going to reveal a secret for those of you who read the Evening Journal, he is also alias Dr. Kidd, who writes the articles that appear each week.

The program this afternoon will deal with legal, legislative and industrial aspects of lead poisoning. Dr. Liebesman.

DR. LIEBESMAN: Thank you very much. Ladies and gentlemen, good afternoon to all of you. I think that we can avoid calling several degrees by calling you ladies and gentlemen. It's such a long time since we have used things like that, I thought I would bring it back.

It's my pleasure to moderate these afternoon sessions on lead poisoning. And I think in order to make it easy to understand, especially for the people who may not have been here this morning, we are going to divide the afternoon session into two parts; the first of which will have to do with the

legislation and legal aspects of lead poisoning; and the second one separated from the first one by a coffee break will be with preventive aspects of lead poisoning.

Since we are going to have six speakers for the first part, and time is running against us, each speaker will be allowed 15 minutes in order to give their talk. And I know there will be many important things to be said, but they will have to squeeze it in that slot of time.

After three speakers, we are going to break for 15 minutes to give everybody in attendance to this conference a chance to ask any questions you may have, and after those 15 minutes, we will keep on moving to another three speakers. 15 minutes each, and then a coffee break.

To start the first half of the afternoon series we are going to have, I think that we are thrilled to have several personalities among us. It's my privilege to introduce to you Senator William Roth from the U. S. Senate. He doesn't need any more introduction. So with your permission, I am

going to give you Senator Roth.

SENATOR ROTH: Thank you. It's a real pleasure for me to be here today. I wish you success in trying to hold political speakers down, but I think my remarks will fall within the 15 minutes.

On April 28 of this year our local paper, the Wilmington Morning News, carried an editorial entitled, "Lead Is Still Deadly," which re-emphasized to me the need for action at all levels of government to eliminate lead paint poisoning.

The writer called attention to the mental retardation of the two Wilmington children as a result of their eating lead paint chips.

Now, I know that speaking to a group like this I don't need to convince you of the seriousness of this problem. The toll which this disease takes is especially distressing because here, like in other areas, we know basically what causes it and what needs to be done to remove it. And yet despite the fact that lead paint poisoning may not present many medical mysteries to us, as other diseases,

it's consequence is a social problem of tremendous magnitude. Great legislative and administrative ingenuity will be needed to mount a successful attack by different levels of government.

A disease that affects as many as 400,000 children a year resulting in treatment for some 16,000 is clearly a serious American health problem. And the brain damage to over 3,000 of these youngsters, many of which may spend lifetimes in institutions, as many as 800. An annual death rate of 200 further confirms this conclusion. The suffering and death development is impressive when viewed only as a human problem.

We should also be aware, however, that our society pays dearly for the care of these unfortunate children incapacitated by lead poisoning as well as for the loss of their productive lives.

Lead-based paint poisoning threatens primarily the well-being of children who, by no fault of their own, are brought up in rundown housing in our center cities, are unusually poor, black or members of other minority groups, but it's also true

that children from other areas have likewise become ill from eating lead paint chips or plaster.

I do think that when judging the necessity of legislative action in this area, you must realize the helplessness of most children who fall prey to this affliction. They are first unaware of the damage they are doing to themselves and very often their parents are poorly informed on such health matters.

Many strongly committed to a vital system of decentralized government, and I think, generally, the federal intervention into any area of legislation formerly left in state and local hands needs to be justified. The federal legislation presently on the book, the lead-based paint poisoning preventive act took a considerable amount to operate through non-federal government to grant in aid.

I am a cosponsor of the legislation before the Senate, 3080, which would renew and strengthen this particular statute. I am convinced that federal action is required in this area of childhood lead paint poisoning for several reasons.

The federal government's power is really more equal to the task of preventing lead paint poisoning than is other units of government.

Constitutional authority to regulate interstate commerce is necessary to the setting of standards for lead content in paint. Further, the national government's huge role in housing allows it to get at this problem from that standpoint also. Further, the federal government possesses an advantage in providing comprehensive coordination to the efforts of different government levels and publicizing the causes, the symptoms and the remedies of lead paint poisoning.

I wish to state emphatically at this point that I am not arguing for exclusive federal jurisdiction in this matter, only a federal role in it.

The national legislators have been faced by at least five major issues when attempting to find the appropriate legislative means by which to eradicate lead poisoning among our children.

One, do the new relatively lead-free paints pose a serious health threat or should all our

efforts be addressed to eliminate the old, heavy paint-leadened dwellings.

Two, how difficult will it be to remove all traces of lead from paints, and what are the economic and social costs of doing so?

Three, to what degree should regulations be voluntary or imposed by the government?

Four, what sources of costs and inconveniences can be justified in removing old leadened paint from buildings?

Five, should there be separate categorical grants in this area?

Quite frankly, as a layman in this area and after looking at the various conflicting arguments on these points, I find it very difficult to come to an objective determination on any of them. This is partly a result of the fact that those with technical knowledge do not agree.

However, I think more important is the fact that the important decisions in this area of legislation, as in most, are quite subjective.

I, like most members of Congress,

would rather air on the side of children who are actual or potential victims of lead poisoning. This does not mean that we should follow solutions advanced solely on emotional grounds without some critical analysis. There is no reason to burden industry and others with regulations that do not help protect our children.

More specifically, how can the Congress and executive branch act most effectively to eliminate the hundreds of thousands of cases of this childhood disease?

As I mentioned earlier, I am a co-sponsor of Bill S3080, so-called the Kennedy-Ryan Bill, to extend the lead paint poisoning prevention act. This legislation would fund more adequately community programs to detect and treat the cause of lead paint poisoning. Early detection is outranked in importance only by prevention itself. S-3080 funds the development in an execution of the state and local programs to identical areas where the risks of poisoning is high and eliminates the heavily leaded paint surfaces.

A third part of an adequate federal program on this crippler would be the adequate funding

of research into the nature of extent and means of removing lead paint as a threat. And tied to this is a very important need to provide more and better information about it to parents, doctors, other health people, and of course, the public at large.

The proposal which I have endorsed provides funds to the Department of Housing and Urban Development for research and demonstration purposes.

A further initiative to combat lead poisoning in the future would be to provide for the practical elimination of lead from paint. A proposed amendment to the lead-based paint poisoning act, which is set at 0.06 per cent limit by weight on a lead content of paint used for household purposes, the Food and Drug Administration has now promulgated such a regulation, appropriate warnings on paint products might also be mandated.

I feel that regulatory responsibilities are also called for in the housing area. HUD could appropriately move to eliminate old lead-based paint from walls and public houses, HUD-owned properties and in its rehabilitation work, at the local level and

building code laws. Enforcement officials, are of course, essential in getting rid of old paint which causes so much of the danger to children and preventing the use of new paint which might be dangerous from being used. There are also some more general governmental improvements from the federal level which might be of aid to prevent this. Better coordination, comprehensive planning in anti-lead poisoning and related health and welfare areas could go on a national level.

Most of our federal domestic assistance programs suffer from this lack of coordination. Apparently in the past lead poisoning was not given much attention among the factual analysis of the categorical grants. Perhaps if it had worked better in the past, we would not have as much of the poverty, which really explains why so many of the youngsters have been eating lead.

The conclusion suggests what has gone through at least one member of Congress' mind in seeking to protect our children from this most harmful malady.

I have pointed out why I consider it to be a problem, why it appears as a federal problem to me, what general issues have arisen, and more specific, legislative and administrative remedies. I feel that the adequate funding activity, authorized prevention under Act S-3080 is a major step in the right direction. Thank you.

DR. LIEBESMAN: Thank you very much, Senator Roth. And our next speaker is going to be Mr. George K. Degnon, who is the director of the American Academy of Pediatrics, Office of Government Liason, who is going to speak on the current status of federal legislation and how you can help.

I would say that it would be proper to say that Mr. Degnon is the representative of the American Academy of Pediatricians in Washington, D. C. And he is quite probably the closest one to our Congress in knowing what is going on and in what refers to lead poisoning. Mr. Degnon.

(Mr. Degnon gave his talk, not transcribed by stenographer.)

MR. LIEBESMAN: Thank you very much, Mr. Degnon. And I am also very, very proud to present our next speaker, Senator Louise Conner, representative for the 5th Senatorial District, born in Wisconsin, attended the University of Minnesota Law School and presently a member of the Board of the Wilmington Senior Center and Planning Counselor, United Fund, Delaware; also Commissioner of the Education Commission of the State's and sitting in the State Senate from 1965 to the present where she also is the chairman of the health and social services community affairs of education and administrative service.

We heard what Senator Roth had to say of what is going on inside the U. S. Congress. We heard through Mr. Degnon how the American Academy of Pediatricians is looking upon what is cooking in the National Congress.

Senator Louise Conner is going to talk to use about the other legislation at the state level. Senator Conner.

SENATOR CONNER: I was fascinated when I was invited to talk in my letter from Dr. McKusick to see that she said that maybe working together in both of our professions that we can get some action, because it does require cooperative efforts.

And our last speaker has talked about the politics of involvement. I am going to talk to you a little bit about how you can get involved in helping the Delaware legislature. We do not yet have a model bill in the sense that Massachusetts does, but we have already had introduced a little piece of that model bill, and it was introduced in January. It came out of the health committee the same day it was introduced and hasn't moved since.

I called the sponsor of the bill, Senator Seconny, this morning, and I asked him how he happened to come to introduce that bill? And this will interest those of you who have just heard the last speaker, because he didn't do it because any doctor came to him or because of any of us on the health and social services committee came to him or

because any nurse came to him or even anyone from the Department of Health and Social Services in the state government.. He was reading the Kiplinger letter one day and he saw in the Kiplinger letter a mention of this problem, and that lead him to introduce his bill.

The roadblock that he has run into is one of total misunderstanding of what this is all about. And I have to confess that I haven't been very helpful to him. It's been my experience that usually legislators, state legislators -- I am sure this is not true of Congressmen -- that the reason we are put on panels like this is to educate us. It really makes us study and do our homework. And we have an awfully lot of material flowing over our desks, and we don't have any staff like they do down in Washington or in some other state legislatures. So we really don't keep up as well as we should, but one of the ways to wake us up and to educate us is to get us on a panel where we know we are going to have to stand up in front of some people. So we read of little bit of what is going on in the world.

So I am aware of the problem of lead

poisoning, and I talked to Senator Seconny, and we agreed this morning that we are going to have to do something about that bill that he has that is already out of committee.

He pointed out, and I remember that when it came up in the caucus it was completely dismissed by some of the best minds in the caucus who felt or wondered where he had gotten an idea like that and what did he know about paint, and there was practically no understanding. And those of us on the health committee weren't that much help to him either. So that he at that moment decided he didn't have the votes and he went onto other matters where he knew he did have the 10 votes that it takes to pass a bill.

So I think that what you all must do now is to write your legislator and write Senator Seconny and speak up in support of this bill which is Senate Bill 542, and if I were you, I would write that down. It's been out of the committee since January, Senate Bill 542, and urge your Senator and Representative to vote for that bill.

Now, it isn't as broad as the Massachusetts bill, but it's a little start, but this is what it does. It says no paint advertised or sold within the State of Delaware for use in the painting of houses or the painting of any part of the house should contain more than .05 per cent lead by weight, and then it goes on to give penalties.

So at least that would give us some help for what lies down the road ahead of us. It doesn't get at the problem of what we are going to do with the old houses in the city.

Now, there was proposed for the current budget, which we have not yet passed in the General Assembly, that I think it was about \$85,000.00 that was proposed which would go for screening and treatment. That has already been cut out of the budget by the finance committee. I called the man who does the secretarial work at the staff person for the finance committee this morning, and he tells me that the \$85,000.00 is not in there at the present time. Again, if you are interested in the politics of involvement, in the new politics, you can write the

Chairman of the Joint Finance Committee, whose name is Herbert Lecher, you can write him in Dover, Delaware, or you can write Senator Dean C. Steele again in legislative hall and urge that money be put in.

Now, the one good thing that has happened is that the federal government is pushing us if we are going to get our federal funds, is pushing us to screen children and probably a lot of you know about that. That will involve a substantial amount of money, State money. It will be \$600,000.00 as I remember it, and it will require that Title 19 children be screened. And one of the things that will show up on this screening is this problem. So that will be some help to us. And here we will have a chance to get at these children in this screening process.

The money, the \$86,000.00 was and may be -- you have talked about some of these things this morning -- but the \$86,000.00 was for staff and treatment. And when we do the screening it will allow again for staff, I think something like 52 or 54

staff people, but again, it won't do anything about treatment. So it's going to be up to you folks to follow these matters in the General Assembly, and I can assure you that letters do make a difference. We don't have the staff again to answer our mail like we should, but we do feel the pressure when you write us. We do feel the pressure when you telephone us.

I got a health bill through last week by having Dr. Glewau call the legislators. I didn't inform the Senators that they were going to be called, but I could tell in the caucus that the phone calls had been made and suddenly, I had the votes and the bill passed. So phone your Senator. Some of the Senators are particularly amenable to telephone calls by doctors. Senator Steele, who is chairman of the finance committee, has a son who is a medical doctor, and he is very proud of him. And if you call him, I find it does make a difference. Now, don't go back and tell him that I told you that.

All right. I am going to talk very briefly about the Massachusetts bill, where, as I have told you, we are a long ways from that, but we do have

the one little part of it, and that has to do with banning the sale of lead-based paint. What they have done up there is to create a director of lead poisoning control within their department of what would be the equivalent of our department of health and social services or their department of public health. Maybe it would be more like our division of physical health. I don't know whether we will move to that particular structure. The only thing that we have currently in the department of health and social services that would sort of be on that level is the drug situation. And there we do have a separate administrator who sits in the staff meeting.

I have been approached within the month to try to get alcohol at that level in the structure. The feeling being that maybe we could get some more federal funds and it would give it a little more status. This can be done, I am told, without going through the legislature. It can be done by Dr. Degans making an administrative ruling. Whether he would see this problem that way and want to make it a separate division, I don't know. My guess is just

from the top of my untutored head, is that it would probably be in the division of physical health.

The Massachusetts bill makes lead poisoning a reportable disease. It authorizes the director to initiate an educational and publicity program and Senator Roth talked about that. It authorizes the director to establish a program for mass screening, and again Senator Roth talked about that. And also that is in our massive bill where we have the \$600,000.00 to screen all of the children. It authorizes the director to set up an area inspection program to locate lead belts of older houses and those of you who followed the newspapers on the Wilmington situation do know that there have been some areas of the city where there has been more of this problem. It authorizes the commissioner of public health to establish a laboratory. And we know of Dr. Hamlee's interest in this. It makes landlords responsible for removal of all peeling lead-based paint. We just passed a landlord-tenant law with more teeth in it than we have had up until now, and it might be where this could be fit in.

Parts of their act have already taken effect. The rest will take effect on January 1st, 1973. They have an appropriation set up for \$287,000.00. This would be a budget request in the Governor's deficiency budget for 1972, and it said it would be used to staff an office, and the rest would be seed money for cities and towns.

Now, we are hoping, I am told by Dr. Glewau to get some money from DART, \$15,000.00, possibly to give a little bit of help, and for the division of health, and \$5,000.00 for Dr. Hamlee. Also in the Congress, Senator Roth had submitted an amendment to a bill that would permit states to apply directly. The way the situation is now, is the applications have to come from the local governments. And this has meant that Dr. Glewau's division in the state government has had to work through the city. And, of course, that is principally where the problem is. But it would still be probably a good move if the State could apply directly.

The federal funds are not about to reach us right away. It would at best take several

months. So as you can see, there is a little movement all along the line on this problem, but what we need is the kind of involvement that the last speaker just talked to us about. We need to have the legislators in Dover feel the pressure of your wishes. We really, all of us are trying hard, I think, to do a decent job, and we have a heart, but we are constantly caught in the money crunch and the squeaky wheel gets the grease. Maybe that is the way it shouldn't be, but usually that works out pretty well.

If you call your legislator, you can find out who he is by calling the Democratic State Headquarters and/or the Republican State Headquarters and find out what district you are in and write him or call him.

I am delighted as a legislator and as an action law student to find out that more people in the medical field are becoming involved in and becoming interested in legislation. I think you are leaders in our society. The delivery of health care is now one of our principal concerns in America, and in Delaware, and we need your help and your expertise

and your fine professional training, and we hope that you will stay with it and become increasingly involved. Thank you.

DR. LIEBESMAN: Well, we just finished enjoying the first third of our afternoon series, and I have enjoyed myself very, very much.

We are going to open 15 minutes for questions and answers. I am going to invite Mr. George Degnon to sit in the podium. Unfortunately, Senator Roth had to leave and he will not be joining the panel in answering your questions, but I am sure that we are going to have plenty of gravy for our two speakers to deal with.

Before I give the floor to all of you, I would like to ask you if you are going to, if you have any questions for us, please give us your name, the position you have, or if you represent any organization, speak loud so we can all hear you, and you can address questions to either Senator Conner or Mr. Degnon. The floor is open.

A VOICE: I wonder whether you read the article in the New York Times that Senator Roth

here in which the DuPont organization ejected efforts from the restricted ban on the use of lead-based paint in homes that were new or refurnished, and we read that in our department up at -- I wondered, were we misinterpreting the article? Are you aware of that article?

MR. DEGNON: I am familiar with the situation that you are speaking of, and it is true that the Department of Housing and Urban Development did exempt itself from its own regulation in regard to the properties it did own. I can tell you that the Academy is in the process of preparing a statement to be filed with the Housing and Urban Development Department, and I am sure we don't stand alone in what actions might be followed at this time.

MISS DURRELL: Mr. Degnon, I wonder whether you can elaborate on economy? I understand from Senator Roth, who I cornered before he left, the bill which he cosponsored has 50 million dollars attached to it for grants to local governments for the effectation, etc. You also mentioned a 9-and-a-half million-dollar figure in the financial government.

Are those two related in any way or are they two separate bills?

MR. DEGNON: The legislative process is broken down essentially into two areas, and we have what we call authorizing legislation. You have authorizing legislation says that governments will commit itself to a program in a given area and it will authorize spending up to a certain amount of monies on that program.

At the present time the lead-based paint poisoning prevention act, I can't recall the name straight, expires in June, June 30th. In the Senate there is Bill S-3080 which renews this project and extends it and it says that in the future we will commit up to 100 million dollars a year to this problem. The bill in the House of Representatives which is now under consideration by the full committee of banking and currency authorizes an expenditure of 50 million dollars. These are the authorized ceilings.

The administration has requested 9.5 million dollars. In other words, it said that even though Congress is going to let us spend 50

million dollars or 100 million on this program, we really only see it as 9.5 million dollars worth of the federal kitty, and this again is what I say, we have to raise the level of awareness to impress upon not only the legislators but also the executive branch that more monies are needed.

Now, someone made the comment to me once that you people in Washington are all mixed up, you are crazy in the head, because you are treating lead poisoning as a medical problem and it's really a housing problem. And I was prepared to tell you some of the problems we had encountered in trying to get this legislation passed a few years ago. We went to the banking and currency committee in the Senate, which has a subcommittee on housing, and we said we think that all communities that want to get monies for urban renewal or model cities should have part of their program a lead eradication program in the community. And we talked a little bit more about lead poisoning. And they said, look, lead poisoning is a paint problem, so go to the Congress committee. We said, no, it's really a problem in housing, and

because the children eat these chips, and they get sick.

They said, oh, the children get sick? Why don't you go to the health committee? And we said, no, it's right here, it's a housing problem. And they said, well, if it's a housing problem, go to the local communities and get your action.

So we are not mixed up and our orders are not out of whack. What we are saying is that we can treat it now as a medical problem, we can get funding for it as a medical problem. The government has not yet acknowledged it as a housing problem.

JAMES BEAUCHAMP: James Beauchamp, City of Chester, Bureau of Health. This is more a statement than a question, but while we are here as a group, I think it ought to be brought up.

Chester tried to get a lead proposal application. One of our biggest problems is what are we going to do about all these lead-painted houses. We are a very poor city, our tax base is eroding all the time, and it's got to a point where if you try and force your landlord to delead a house, there is a

good chance you are going to end up with a vacant house, one that is paying no taxes and one the city will wind up having to tear down. And I think that many communities here on the Eastern seaboard are probably faced with the same problem. And what we do need is some kind of relief to delead these homes. I guess an estimate I have made just to delead the houses in Chester would be somewhere in the neighborhood of 17 million.

Now, what I am trying to say, we don't have to delead all the houses, but you do have to delead some of these houses where you don't have to delead all the houses where you have children that have excess of lead in their bodies and require treatment under the present plans. So we are going to have to think of something or get some kind of financial help to delead these homes. Thank you.

SENATOR CONNER: I don't have anything constructive to say. I think that along the Eastern coast here in the old cities this is a real problem. I can say that Massachusetts which also has old cities did face up to this and they did deal with

the landlords and made it part of the thing that they have to do in order to rent a house, and even went further than that and said that it cannot be an excuse for not renting to a family with children, because they would have to do this fixing up. But I don't fully understand where they would get the money if they are in a situation like Chester is, and I can certainly appreciate what he is up against.

A VOICE: This is for Senator Conner. I would like to know what some of the penalties are in your Senate Bill 542? I think in the past landlords have been able to get away with such small fines that it was cheaper to pay the fine than actually face up to the problem. I would like to know what some of them are. My name is Jean Roberts, Headstart.

SENATOR CONNER: The penalties are still not very high. He put an amendment on his bill and he said that the fine should be not less than \$100.00 for the first offense and then they would jump to \$500.00 if it is not remedied.

Now, that isn't very much of a fine. It's for less elaborate housing. It would be a little

bit if he wants to rent it, but we do face the prospect of if it gets too stiff of not being able, of putting the landlord out of business. So that it's not an easy matter.

PAULA LERCH: Paula Lerch, from the City-County Health Office, Wilmington. I was under the impression for a long time that there was a federal law forbidding the sale of lead-based paint for the use in internal surfaces and on toys and so forth. Do I understand now this is just a voluntary regulation?

SENATOR CONNER: That is interior you are talking about? And Senator Seconny's bill is exterior.

MR. DEGNON: There had been State laws and there have been municipal ordinances where municipalities have enacted regulations or ordinances, whatever we might call it, prohibiting the sale or the use of paints with the content of lead. Back in the 1960's the American Academy of Pediatricians got with the American National Standards Institute and we pointed out the problem of lead in paints, particularly on toys, and because of its problem in

interior surfaces. The American National Standards Institute issued a standard saying that paints should not contain more than 1 per cent of lead for interior use, for use on toys, children's furniture, etc. This is a voluntary standard. The first real bite that we have, the first breakthrough that we are about to achieve is through the petition that had been filed with the Food and Drug Administration declaring that paints which contain more than, well, the regulation, it will say more than .06 per cent lead will be declared lead hazardous substances. That is the first official regulation or law at the federal level that deals with the problem that is mandatory.

I might also point out that right now we are in the midst of an altercation or controversy with the paint industry, and I anticipate that this will probably be resolved in the courts rather than through the regulatory process with the Food and Drug Administration.

MR. LIEBESMAN: We also have representatives of the paint industry who will be here today. I would like to remind you again to give us

your name, the agency you represent and to whom you direct the question.

MRS. LOCHLIN: Mrs. Lochlin, Buffalo, New York, County Health Department. Senator Conner, I was wondering what kind of law -- you said you had a landlord-tenant law. In that law, does it protect the tenant against eviction or something like that when there is a lead paint problem in the home?

SENATOR CONNER: The law that we just passed didn't have anything about lead paint in it, but it did have machinery for protecting the tenant and it did give him remedies in case he was not given the adequate and adequate repairs and so forth. So my reason for suggesting it is we might be able to work this kind of thing into the structure of that law.

MRS. LOCHLIN: I hope this will happen, because we find in New York, in Buffalo, that there was a loophole left and unfortunately some of the tenants are being evicted, not because lead paint, per se, is found on the wall, but they find other excuses for evicting, and you have a relocation problem.

I just wondered what you had?

SENATOR CONNER: I will talk to the people who drew the bill and sponsored it and we will bring this to their attention.

MR. LIEBESMAN: That may enlighten what we have been discussing.

JONATHAN STEIN: Jonathan Stein from Community Health Services, Philadelphia. Just as a footnote to the previous comment that falls under the heading of regulatory evictions, where a landlord exercises a right which the State legislature gave the tenant, are the State legislators aware of the consequences if they exercise the rights by tenants and rights of becoming nonexistent because of fear of landlord retaliation. The Massachusetts bill which Senator Conner referred to has a retaliatory provision in it. The Pennsylvania bill introduced last month has the same protection, and I think it should be written into every piece of State lead poisoning legislation or landlord-tenant legislation, because any protection of a tenant by a law becomes viciated totally by the retaliatory acts of the landlord, and

you can protect a tenant against retaliatory landlords.

SHIRLEY ORTLIEB: Shirley Ortlieb, County Health Unit. Senator Conner, what is the time limit allowed to the time of the next fine if repair is not made?

SENATOR CONNER: It doesn't say. It was a very brief amendment. It didn't say. You understand this bill is still before us, so I can bring that to Senator Seconny's attention.

MISS ORTLIEB: So that if an owner had a family in there and made a complaint and as a result the tenant was evicted and another family came in and didn't complain, this could go on for another year without a complaint, so you have four more children with lead poisoning.

SENATOR CONNER: Yes.

MR. PEASE: Mr. Pease, New York City Health Department. In 1970 New York State legislature passed a lead control bill which became part of our State Public Health law. A normal fine for violation of any part of the Public Health law was \$250.00. The State legislature added to this and declared that

any violation of the State lead poisoning control law would be a fine of \$2500.00, which is extremely strict, but they felt that they wanted it strong enough so that it would encourage the landlord to make corrections.

Now, I think the only place that it has been really tried out is the New York County Health Department, and they have fined in a number of cases landlords a thousand dollars, but have suspended them upon the provision that they correct the hazard. And as far as I know, in only one case have they had to collect the fine. So this is an effective tool if used properly.

MR. DEGNON: You somewhat moved onto an area of lead paint poisoning of which I am very much interested. And according to a study that I did in New Haven along with Dr. Begs, we came to the same conclusion.

MR. PEASE: I have recently heard only the process of correcting housing, and I would like to compare this with, if this is what is done in the medical field, cancer or leukemia. If you remove

all of the diseased blood and replace it, I should think that that new blood will become diseased. So you have not touched on the problem, you have not stopped the problem, and I would think this would require removal of lead paint.

You mentioned social factors. I would agree with that. Also I would feel that these social problems might be imposed on those who are so unfortunate by other forces.

Now, this would be the social structure. What is being done in that area? I am wondering if your fellow workers in Washington, shall I say, attempted to look at lead poisoning from that point of view? Someone mentioned that it isn't the child's fault. Have we ever thought of rehabilitating the family? I believe that you could remove, and I don't think it would ever happen, maybe in the next 20 years, you are not going to remove all of the lead. And it's quite evident from the majority of faces here that most of you who have children have not had a child with lead paint poisoning.

Now, why didn't you have children

with lead paint poisoning; I am sure we did not all at all times live in houses that were completely up-to-date, that did not violate the housing code so far as lead paint poisoning is concerned.

I would like to think that we might take a different approach to solving or attempting to control the problem of lead paint poisoning. And I would also like to believe that removing the paint is not the solution. I think it involves a number of projects which might appear insurmountable to most of us, but this is where we are going to have to start.

Now, if you will agree with me that there are a number of social factors involved, how can we go about getting the people who are in the position to make policies and pass on these things to see it that way, and working it from that point of view, from all angles, not just from removing the lead.

MR. DEGNON: What I think you are proposing is that we sit down, identify the problem and then identify all the possible solutions, all the steps that should be taken. And I couldn't agree with you more that that is the way that it perhaps should

be done.

My orientation is such that political process does not always operate that way. And I think that what I am saying is that we have to utilize what advantages we have. We have to utilize whatever areas of potential impact exist for us and hope that eventually over a period of time we can make the desired impact in all the possible approaches.

You know, we haven't discussed the matter of public education, of current education and things of that nature, which is one of the things I believe you touched upon.

MR. PEASE: I would also like to quote Dr. Chisolm that a few thousand of dollars to do a little is wasted, useless, and this is what we have gotten since 1935. Yes, we have made progress, but since 1935, I should think that the trends would go along in a different avenue, although you only have one avenue to pursue. No one can be convinced that since 1935 it hasn't worked. Why do you think it's going to work now? You are going on the same progress and the problem still exists, only greater in number.

MR. LIEBESMAN: The last few comments is the proof that this is coming along beautifully. I think this is the best thing we could have done, because if we are going to study lead poisoning, it's fair to listen to what other people have done in Connecticut and New York. Unfortunately, the time is running out and we have to keep on moving along. I hope that we will have another opportunity to sit down and continue with this discussion, because I think that in the past 15, 20 minutes, while we were talking here, lies the answer, if not the whole answer, part of the important answer of lead poisoning.

As I said before, unfortunately we have some other speakers waiting for the podium. We would like to thank very much Senator Conner and Mr. Degnon. Also I want to thank all of you who asked really interesting and intelligent questions.

Now, we are going to get ready to enter the second third of our afternoon conference, in which we are going to have again three speakers, one of which I may say is already known to you, since he got up a few minutes ago to answer one of the

questions. And this is Mr. Jonathan Stein, who is an attorney and from the Welfare Rights organization and the Commission of Legal Services of Philadelphia, Pennsylvania, who is going to tell us about the need for combined legal and medical responsibilities to childhood lead poisoning.

MR. STEIN: I am from the Welfare Rights organization in Philadelphia, but also as counsel to a citywide coalition of childhood lead poisoning, which Sid Sussman, I think, earlier in the day referred to. I would like to follow the earlier things on the politics of lead poisoning, because I think that is the crux of doing something about the problem. And when we talk about the law of lead poisoning, you can talk about this landlord-tenant matter. You know, there are negligence suits against landlords, against paint manufacturers. And I think that is worthy of some discussion at this point. But also I think the main emphasis has got to be on legislation and effective programs to eradicate lead poisoning, because eradication of lead poisoning is really, as Renee Goboe said a couple years ago, is

possibly right now. We know everything about the disease, the technology of getting rid of it is apparent to everybody, but he did say that because of his knowledge and the fact that this thing is staring everyone, you know, in all our faces in terms of its breadth and the effect of this epidemic, that it's really a test of the social conscience of this nation to get rid of the lead poisoning, and if the country fails in this attempt, our society deserves all that will befall it, and it's a microcosm in that sense of just, you know, coming together over a variety of problems in our country, and it's really a test of the willingness in this room, the willingness of our government to respond to it.

The history of response to lead poisoning has been one of complete failure. I think that is perhaps one of the reasons why we are here today. The track record of medical schools, medical societies, legislators, politicians, health administrators, everyone that should have some professional responsibility with the area has been one of fairly complete failure. There have been a few notable

people who have spoke earlier today who have done the work, made the commitment, but up until the past year or two, as I said, the track record has been practically nonexistent. And I think the explanation for this is in part one of the high facts about lead poisoning, it affects black people, it affects poor people. And the history at least of how our government has been working up until very recently has been largely to ignore problems, including health problems of poor people and black people in this country. And I think some of the remedies for that ignorance and indifference and they have to be, I think, viewed in a political nature, those remedies have to be analyzed and seen in the context of health systems that ignores problems of poor people and black people. And we have got to look at some resolutions for that in our political system. And I would make this suggestion as to how we might go about doing that.

I think the main program to get rid of lead poisoning is not rehabilitating the families or perhaps making scapegoats out of parents who are as

innocent as anyone else, when their kids get lead poisoning, but to have an effective bilateral program of emphasizing the health side of massive comprehensive blood testing, screening, whatever the best medical test is of kids, coupled with an environmental attack on testing, inspecting every single house in risk areas and getting the lead paint out. Until you buy that assumption as a policy matter, lead poisoning is going to hit the kids of today, it is going to hit their kids and their grandchildren, 30, 40, 50 years from now. And in looking at it this way, you have to be honest about the cost. We are talking about an enormous investment by our government, particularly on the environmental side which could run into billions of dollars over a period of years. And you know there is an enormous cost involved, and I think that can't be ignored. But if we are going to be serious and honest about doing something about lead poisoning, that kind of investment effort must be made. And it may well change various other priorities that our country has set for itself in terms of where it's putting its money and where it's putting its tax

revenues. Let me add that that prevention program can be made a part of law. The federal legislation which we talked about, which I can go into a little more detail on later, if there is time, makes a crack at getting at or at least establishing a prevention program that has both a health side and environmental housing side.

I think George mentioned the craziness of our system as to how the health side of the problem has been addressed by the federal government, totally ignored, the housing side. You have to look behind that. You know why the housing environmental side has been ignored? Some of it involves the politics of legislation, the appropriation committee in the house happened to be the HEB with HEW appropriation subcommittee. Its people are not too allied to housing matters or environmental matters. They saw the issue as a health problem. There was no political constituency lobbying people out there in Delaware, Pennsylvania, New York, to get to that health subcommittee to tell them that, you know, let's not have a narrow view of this problem. It's a bilateral

problem. You have to fund the environmental housing side as much as you do the health side.

Okay, that wasn't being done last spring, a year ago, and that is why you have this perversion of priorities leading to possible consequences of having the kid tested for lead, having him found to be lead poisoned, but there being insufficient money to get the lead out of his house to which he will soon be returned.

Now, that kind of crazy result, and it is absurd, it is irrational, it makes no sense in terms of some kind of rationale policy, but is as common in large respects from the system that is passing the law. And the lack, I think, of sophistication and knowledge of people on the outside, including ourselves in Philadelphia who weren't aware of that particular aspect of it, and that is the result.

I would like to point a finger too at some of the HEW administrators here who are really some fine people who will be speaking, who have this information and knew the politics of it, but because

of maybe the way they run their show, you know, are somewhat closed in terms of not letting in information. I think they could do it as part of their job. I think they could do it in whatever subtle ways they could do it to communicate to the people on the outside. But that significant policy decision was known only to a small clique of people. And at least the administrator of the program, the bureaucrats are the people in the system, all of whom I am certain are well-meaning people, they are the most dedicated people in this area, still did not see the value or put a value on getting that information out to you all here and to people across the country. And that really has, you know, that is just one isolated kind of manifestation of the need for, I think, sophistication on the part of everyone, community people, professional, administrators, legislators, together. And that is why I say that the legislation, the social policy movement and the whole thing can't be done in the abstract. You need a political constituency, you need allies between communities, professionals, administrators and legislators, and

until you get that alliance, which will at a minimum get information to be exchanged between these various constituent groups and perhaps hopefully lead to some ordering political action at various levels of government, we are not going to make the dents that are required, and more than a dent, the eradication of lead poisoning.

The funding aspect of the program has been spoken of. You have a Congress that has authorized 30 million dollars a year or so ago. The administration, the current administration asked zero dollars in their first go-around. And because of community pressure they uped it to two million dollars of the 30. The compromise became 7 and a half million dollars. You know, 7 and a half million dollars for the entire country -- Philadelphia was considering a request for 4 million dollars. I am sure Wilmington could easily use a million dollars or more for a start. Chester, you know, all the cities here could use large sums of money. But you didn't have the large sums of money either authorized or appropriated because of the lack of political constituency.

You had HUD, the Housing and Urban Development Agency, which the law specifies has responsibility for research and development. When Congress asked HUD whether they need money to effectuate the law, HUD said, "We don't need any money." And so that HUD is really doing nothing right now, practically nothing about lead poisoning. And, in fact, they are even trying to come back and say, "We are not going to be responsible for our own properties."

As HUD becomes the leading slum landlord in cities they are trying to, well, they are taking the position that, "We want to be traditional slum landlords, we don't want to take on the responsibility of lead." And that is a current problem.

So I think an emphasis has got to be put on getting alliances together, getting some sophistication into lobbying. The things which the Academy of Pediatricians is doing and has done should not be as an academy or group of professionals doing their thing. They did some good work in getting the

.06 standard per cent. And that should have been related to the efforts of lots of other people. And so you have a real joint effort underway.

One of the things which we got into a Senate bill, the coalition in Philadelphia, and this hopefully will get into the law, will be a national advisory board on lead poisoning. The idea behind that being that that should be kind of a national forum people from around the country. And the specific requirements that consumers, parents of kids, of a majority of substantial reputation on that body, and hopefully that may be a kind of nucleus to get interested people from around the country meeting regularly, exchanging information, getting to know the federal administrators, the administrative process and maybe help those administrators do those things they want to do.

That latter aspect, and I may be kind of jumping here and there, because of some scribbling I did on the train, that aspect of it of having consumers' control, and control maybe is becoming not the right word to use these days, but I think we

ought to talk about control. Although it might be under the gist of advisory board or whatever, you need the parents of kids who are affected by the program to assume control of what the legislators are doing, over what the administrators are doing, over what the doctors are doing or not doing.

And there has been, I think, a total absence of that in most health programs. And I think most lead programs, because there is generating interest now in the problem, this may be a good opportunity for parents, for community groups to get in, you know, into decision-making.

The coalition in Philadelphia had meetings with the health commissioners. They demanded that they change their prior testing. Lead poisoning got less money perhaps than venereal disease or tuberculosis, which was a big public health issue over the decades. A demand was made that the priorities be changed, that the health commissioners get the courage enough to buck the city administration to ask for the money.

There was a self-censorship, we know

we are not going to get it because we are not going to ask for it. That is a professional cop-out. You are a doctor, administrator, you have got to do your job and ask for what is needed. City counsel was pressured. They passed an appropriation of \$600,000.00. The Mayor then froze that money, and that was followed by picketing in City Hall. Soon thereafter and suddenly on that same day of picketing, \$600,000.00 of model cities money was suddenly found in Philadelphia, just happened to be the same amount which city counsel appropriated and was frozen by the Mayor, and that began a Philadelphia lead program.

But nothing would have been done in any of those levels, health department, city council, mayor, model cities, unless the community got itself together and made itself vocal, and that is an enormous need to do that. It's not only to make that initial push of getting the problem, of getting the priorities, but it's a follow-up. And this is where community participation control often falls down. You have to keep an eye on administrators, you have to find out how they are implementing the laws, how

the laws are getting passed at every stage in Congress, and unless that is done, the community impact can be minimum.

Just to give an illustration there, you had a city ordinance in Philadelphia which is like the ordinance in many other cities, Baltimore I am told and some other cities which empower the health department to order the removal of lead, when they find lead paint there. And in Philadelphia, when there was a health hazard to children that was found by the health department, that was a nice law. When the administrators, the health department began to implement it with some assistance or nonassistance by the city legal department, they were told, well, let's be very safe, let's not remove lead paint until we see that there is a health hazard, and when there is a health hazard, when there is a kid that is poisoned, we are going to wait until there is a clinical case of a kid being poisoned before we go in and remove the lead paint. City council didn't know about that interpretation, but this became the law. In fact, as a result of an administrative

decision, and that led to after the fact programs of getting kids poisoned many months after the lead might have been gotten out of the houses.

The coalition got that interpretation changed, not by new law, but just by telling the health department of the absurdity of it. How do you prevent poisoning or get the lead out of homes before the kid actually is clinically poisoned? And there was an aspect of community input, you know, community decision-making, of getting administrators to respond and to change interpretations of the law.

And in terms of this participation, one of the things, the new things to look for in the new Senate Act in S-3080, which hopefully will become law soon, is also a requirement at the local level and I hope it's there, we were told it would be there, and maybe some HEW people who may have seen the actual final print of the Senate Bill could tell us, but there was also to be a provision in there that local health departments created lead poisoning advisory boards made up of parents of kids from the areas, and that they advise the health department.

They have the powers of going over the budget, to make sure that the application to HEW or City Council is sufficient. They monitor the administration of the program to make sure everybody is doing their job. They work with the administrators to improve the program. That kind of thing at the local level is as important as it is at the national level.

And, in fact, both the federal bills just as another point of the community aspect of it, have requirements that for all the jobs created on the treatment and the medical treatment and the environmental housing inspection that community people from the areas affected by the problem get hired in the jobs.

So that you have perhaps a greater accountability to the community that is served by people from the community actually do the lead poisoning detection and testing and inspections.

One quick word about this State legislation. The federal legislation still needs a lot of pushing. There is a House Bill which is in under the housing bill which has got to get out and

join up with Senator Kennedy's bill. The important thing of this go-around may be in accordance with health generated, and the interest is at the appropriation stages. You have got to make a fight there also. You have got to find out where your centers in Delaware are, your Congressmen in Delaware are, New Jersey, in New York, are on the appropriation committee in the House and where they are in the appropriation committees in the Senate and zero in on those people to make sure that the appropriations come close to the 50 or 100 million dollars that is authorized.

If nothing is done, you are going to have the same compromises as last year, and somebody, you know, cuts this in half, and the guy down the line cuts that in half and administration asks for money or two million dollars and you get pittance for the entire country. So that is just a note for thorough legislation.

On the State legislation, I think, this beginning bill in Delaware, you know, is the first step. I think it totally inadequate. It

probably is not even worth supporting, because it will just merely fool people into thinking that it is doing something, when it's really not doing anything for those kids who are living in poor housing right now.

I would hope Senator Conner does express interest in the comprehensive Massachusetts bill, and I would hope that does get introduced in Delaware.

We in Pennsylvania got that introduced May 1, and it's call House Bill No. 2093, which is really a mirror of the Massachusetts law, which is now law, got passed in the Massachusetts legislatures. And we would hope that this, which can be considered a model piece of legislation, gets supported in all legislatures around the country. Most of the city ordinances are pretty crumby, so I wouldn't start keeping Philadelphia ordinances or Philadelphia has one of the perhaps better ordinances and it's being sent around the country for adoption in localities. I would not copy that directly, I would look to the Massachusetts bill for both city ordinance

legislation and State legislation. In fact, federal legislation, we intend to get some of that into the federal law and did to some extent.

I would like to end here and just open myself to questions after the speaking period, and after to just chat with people about what people are doing at the community level. Those who are interested in getting a national alliance together or lobbying force, I would be interested to speak to you.

Mrs. Singleton, who led the coalition, will be speaking tomorrow morning about this, and I just think in summing up that that is really where the action has got to be, an alliance of community people and administrators with the intent of forming the political constituency to really eradicate lead poisoning once and for all. Thank you.

MR. BATTAGLIA: Thank you, Mr. Chairman. Ladies and gentlemen, when I first got invited to speak to this group, I thought, as did Senator Conner, that perhaps this would be a good place for me to be educated rather than to educate

anybody else. But I notice with interest from the questions that were asked a few short minutes ago that apparently Wilmington has got to be one of the very few places that has adopted any legislation at all on the subject matter. So I think what I would like to do right now is to tell you about the legislation that was adopted in Wilmington.

Let me just pause a second to ask if Dr. Rose is here. It's a shame that she is not here, because she has been almost completely responsible for anything that has happened in this city with respect to the subject of lead poisoning, and that includes covering the subject of legislation. She is a great gal and if she will excuse me, I will say she is the father of our lead poisoning program.

We adopted in 1963 an act which would prohibit the use of lead-based paints which would have as much as 1 per cent by weight of lead. There was a general prohibition on the sale of paints without containing a warning that paints could be dangerous if they contained more than 1 per cent by weight.

The sale of toys and furniture for use

by children was prohibited if it contained more than 1 per cent lead. And Dr. Rose got ahold of me about two years ago and indicated that those standards were no longer acceptable. And in January of 1971 our City Council, which is very responsive, by the way, to Dr. Rose and her group, adopted a new act prohibiting the sale of any paint to be used for interior surfaces for walls, ceilings, etc. with any lead content, and likewise removing the 1 per cent limitation that had applied before the passage of that act.

Now, I would be less than candid with you if I were to say to you that we have an effective lead control program. I think the fact of the matter is that we do not. And we have the legislation. What we don't have is the funds with which to administer the program.

In those situations where the use of lead paint has been detected, the Department of Licenses and Inspections has been successful in coersing the people responsible to remove the lead-based paint, even without the need of prosecution.

But the statute or the ordinance is a penal ordinance and it can be resorted to if need be. The problems, of course, in administering an ordinance that contains a fine is that the fine doesn't really solve anybody's problem. If it cost 5 or 6 or 7 or \$200.00 or a thousand dollars to remove a lead-based paint and to put other paint in, it doesn't seem to me that you are advancing anybody's problem by taking the money away that would be used for those purposes. And, as perhaps somebody else indicated that preceded me at this podium, it solves nobody's problem to create another vacant dwelling which must be vacant because the people won't comply with the lead paint requirement.

So the purpose has been to keep as many dwelling units open as possible and to coerce the landlords or the habitants of the property, if they own the property, into removing the paint and keeping the dwelling as one that can be habited.

Now, there have been several solutions suggested to the problem that I have just discussed, and we are watching an act that was passed recently in New York where the owners of properties were allowed

apparently 75 per cent, up to 75 per cent of the real estate taxes as a credit in the event that lead-based paints had to be removed. And the adoption of such a program here is a possibility, depending, of course, upon the number of applicants for such relief, and the reception that city council would give such a measure.

We have been in our department, in the law department, in the City of Wilmington, considering for a significant period of time some sort of a requirement that would apply in the city that would make it mandatory that medical personnel when they encounter a case of lead poisoning report that to the Department of Licenses and Inspections. And this is one measure that would perhaps alleviate the needs for funds to do a systematic campaign to go from door to door to find out which places have the problem and which places do not.

There are other problems too that our department has been considering, one of which is what do you do with the material that you will require the people to take off the wall? What happens to the

lead paint peelings and that sort of thing? I think I perhaps see it's 3:00 o'clock and we are apparently to take a break at 3:15. I wanted you to know about our legislation most of all, and I would say this, that if there is anybody here that is interested in receiving a copy of our legislation, we would be most happy to provide it. If you would simply direct an inquiry to the Law Department, City of Wilmington, Wilmington, Delaware. Thank you very much.

MR. LIEBESMAN: I am sure that the audience is going to have many questions for the period that is going to follow after Mr. Tennessee Jackson, who is going to be our next speaker. And his subject is going to be problems relating to the enforcement of the housing code.

Just a few words about Mr. Jackson. He was born in South Dakota, but he attended school in Wilmington, Delaware. Also attached to the University of Massachusetts, the University of South Dakota and also the First Institute of the University of Pennsylvania where he received a master of government and administration. He is presently the

Commissioner on the Department of Licenses and Inspections of the City of Wilmington. I am sure that Mr. Jackson will have something to say about the housing code.

MR. JACKSON: Thank you very much. I feel somewhat like a postscript at this point with the last two speakers. I think they have covered the topic very well from both legal and the administrative problems that I face. I might just mention, I am going to be brief because of this, and I think we will get into the question aspect of it.

The enforcement problems have been mentioned very clearly by both Mr. Stein and Mr. Battaglia. One additional fact, and this may be my only addition to the whole presentation at this point, as far as the enforcement and the elimination of lead paint from houses when it's detected, is that we have got a figure that we have estimated between \$600.00 and \$1500.00 per house to eliminate the paint when it is found. This may be either by scraping or by flame burning the paint off the wall, and this is obviously very expensive when you are speaking of

low income either rental property or a home-owned property, which is owned by a low-income owner.

The problems of coming up with this kind of money, we have plenty of discussions about the need for probably federal dollars. Everyone knows that local government and state government, particularly Delaware today, have their own financial difficulties. And finding new dollars is a real problem.

One note on the detection aspect. I have recently become aware that there had been some advances in the technology in detecting lead in the paint. I came prepared to expound on a machine worth about \$5,000.00 which has been developed by a place called or an outfit in Princeton, New Jersey, Princeton Gama-Tech, and I mentioned this to a doctor in the back of the room before, but that is all real fine, but it only works on flat surfaces. And, of course, we know window sills, of course, being round surfaces, and one of the major areas which children get to the lead and the chips.

I think the real problem, as I say,

the detection I think is going to be solved. I think that with a machine of \$5,000.00 and one man, that you can do a lot of work in a short period of time. And I hope that Wilmington will be able to do that in the near future.

We are coordinating with the city council, county health department to apply for funds. They are specifically, of course, interested in screening and treatment of children found with lead poisoning, and are attempting to push for the inclusion of dollars in any federal funds that may come forth to actually help in the eradication of the paint when it is found or detected. And, as I say, the problem is dollars. And with that I will return to you and we will get on to the questions.

MR. LIEBESMAN: Thank you very much, Mr. Jackson. And now I would like to invite Mr. Stein and Mr. Battaglia to the podium.

MR. DAVIS: Ralph Davis, Hartford, Connecticut. A general question. Resulting from recent publications of a study by a student of Dr. Lee Powers who has done an excellent job which indicate

that suburban children also are exposed to this situation occasionally. I think Mr. Stein's comment about the need for that alliance, could not one of the strategies be to attempt to indicate to the country that this danger exists in areas outside of the inner city? When we think in terms of the lack of real activity in drugs until they began to show up outside of the inner city --

MR. STEIN: I think that is a good point, because it does build alliances.

Sierra Club, the environmental group which has a lot of sophisticated lobbying power, lots of people out there, and their whole emphasis has been on clean air, clean water and open land out there in the country.

Our group is the kind of group that could identify with inner city problems in part, because the problem isn't solely an inner city one. Many representatives, particularly some of those representatives who are not tuned into city problems as well as some of their suburban or rural constituents say, I am worried about the pottery may have lead in it.

Maybe that same city fellow is worried about lead paint in the house and gets some legislation through, but I think that is a very sound suggestion.

MR. BATTAGLIA: It might be a very desirable thing, really, since I don't think there are any restrictions in the county, or I don't know any in the State of Delaware other than in the City of Wilmington. It might not be a bad idea if the city statutory scheme, which includes, as you know, many programs, may not, a prohibition for throwing a tenant out for making a complaint, which is retaliatory eviction. It provides for mandatory clearing up of the situation. It provides for the imposition of fines and is a pretty decent statutory scheme.

MR. BASKIN: John Baskin, City of Philadelphia Health Department. Two points for Mr. Jackson. Princeton Gama-tex, which we have two units in Philadelphia right now, reads curves as well as flat surfaces, and we find it a very, very helpful instrument in determining the concentration of lead paints in walls and woodwork. And secondly, you talk

about the cost of paint removal. Everyone talks in the same figure of what it costs per dwelling unit. We are moving towards a cost per square foot, and this would be a much more ideal figure, for comparisons among other cities. Once you determine what your percentage cost of labor is versus your materials and so forth used for removal of paint, and if every city goes along the same lines, this is one area where you at least compare what the cost is per square foot for removal.

MR. JACKSON: Our experience in Wilmington, we haven't really gotten involved deeply in the eradication. We have been doing it on a case by case basis.

MR. STEIN: One point about the abatement process. That is, you need very restricted enforcement. You have to get your health department to do its job and get the city solicitor's office to do its job, get them rolling. There was some talk about fines and the limitation there. The thing which we did in Philadelphia was get the city solicitor's office the health department to go into equity or chancery

court to get injunctions, that was the magistrate's or municipal court, to get a \$50.00 fine. Injunctions are much more serious business. They involve contempt of court, as you know, putting in prison or jail, which is an ultimate penalty. And it's a way of streamlining 20 or 30 of those cases before one judge in equity and avoiding the fine route.

Another aspect of enforcement which wasn't discussed is when they are low-income homeowners, you are really faced there with a very tough problem of socking it to a homeowner who himself may be low income, may be a defrauded FHA home buyer, which is becoming very common these days in big cities, for that person, and in small cities too, these lead to George Romney becoming the world's biggest landlord, but later in the game -- for that low-income homeowner, there has got to be a government abatement plan so that the health department with federal funds has money to do the abatement work itself and not squeeze, you know, the last drop of blood out of a low-income homeowner. And more than that, a homeowner who is a mother of a kid who is being poisoned perhaps and who

is really up against a wall now by this city health department.

I don't have as much sympathy for landlords. That is perhaps my bias, but they are getting rental income from the property and they are supposedly making a profit. They wouldn't be landlords if they weren't making a profit. And if they can't do the job, the government's got to come in and perhaps take over ownership of the house. But the history of strict code enforcement, squeeze the landlord, and the landlord gets government subsidizing.

In New York they get tax credits to help them do their work, so you shouldn't be able to put it off by the traditional thing that you can't put this social-economic loss on landlords, because when you do that, that leads to enforcement. When the cost is put on them they find the means somewhere else, so often from the government or city or federal government.

MISS ORTLIEB: Shirley Ortlieb.
Everyone keeps talking about the cost of taking the paint off the walls. Has anyone compared it to the

cost of caring for a child in custodial care for the rest of his life or the cost that it cost the parents in heartache?

MR. JACKSON: I think there is an obvious answer to that question. That has not been done and you can't answer a point like that in the negative.

MR. STEIN: It's a very telling argument to a legislator. It costs a quarter of a million dollars to institutionalize a child, and whatever human suffering there is, that cost, as opposed to the cost of enforcement and getting the lead paint off.

HELEN DAMER: Helen Damer, Delaware. I am a little upset, because I get upset when you are sitting here discussing lead poisoning, where to get the funds from, when you are talking about atomic bombs, sending people to the moon, our taxes are paying for all of that. When it's there and it's ours, why don't you get rid of it?

MR. JACKSON: The obvious answer there is that more groups like this have got to do

more lobbying.

MRS. DAMER: The gentleman here was discussing conducting a survey program for lead poisoning in suburbia. It may interest you to know that we have a 26 per cent positive finding for lead poisoning in the homes that were checked of pre-World War II vintage. You have 13 per cent of that 26 per cent of youngsters that we tested with critical levels of lead in the blood in suburbia. This will answer your question. We sat here all day and listened to the city area and their problems, and we find that they relate very closely to the city area and their problems to the suburban area. And our own problems when you conduct a lead poisoning survey. I mean to ask this of Dr. Sachs of Chicago. Real estate is not a static situation. We discussed the prevention of the deterioration in housing. I, therefore, feel that prevention is one of our most critical aspects of any lead poisoning problem and any lead poisoning program. I meant to ask her. Apparently she went into the oldest neighborhoods, but white areas have a tendency to spread just like a

cancer does. I wonder, are you paying any attention to the areas that are contiguous to known depressed areas?

MR. JACKSON: As far as the City of Wilmington is concerned, we are not doing anything on a systematic survey basis. Obviously if we did get into a program in the entire cities, would be my responsibility, and it would be my job to work out a program that would attack the cities on the entire city, of course.

SARA BISHOP: Sara Bishop, Philadelphia. Have there been any figures on rural population, on rural children?

MR. STEIN: I think the ETA environmental protection agency, I think, has done some studies looking to lead in the air as a source of lead in the blood and found a marked difference between the amount of lead of kids in the cities as opposed to suburban areas.

They also, by the way, reaffirmed to eradicate paint poisoning, because one of the conclusions is that if the combination of lead oxides,

lead in the air and lead paint in ingestion creates a very lethal kind of one-two punch for children. And, in fact, maybe you want to make a point of that. Some people might want to distract you by saying that lead is coming from someplace else and let's deal with lead in the air and lead in gasoline. It's worth, I think you know, doing both as contributing factors. I think the kids are really getting lead poisoning from the ingestion of lead paint chips. But you could again team up with those environmental people, and they are pretty strong, in Washington, trying to get lead out of gasoline, to get stronger legislation of lead paint poisoning.

DR. CRAVEN: Someone earlier from Connecticut mentioned the study about migrant camps. And as I recall the article, the people checked the paint in the homes of migrant workers and this is probably another population at risk. Unfortunately in this particular study, they studied walls, not children. But I would be sure if we studied the children, we would find another good group at risk, the migrant children of migrant workers.

MR. BROWN: Jeff Brown from Rhodan Hospital in Rhode Island. In Rhode Island we studied a large number of people outside the central city, and we haven't found anyone who really qualified with high lead levels. There is a pocket of houses of which there are several dozen houses which are in very poor shape in a rural area, and the socioeconomic setting is there, and the houses are bad, but there is no lead poisoning for some reason. And I have talked to the people in Vermont, and they have actually looked for it there and they have found none. And I think that the common denominator is that these children living in the poor houses in a rural setting have square miles to run around in. There is no congestion factor. Everything else is there but they have other things to chew on besides lead paint.

MR. THOMAS: Ralph Thomas. I would like to direct my question to everybody. If we follow up in really enforcing a top local combined state ordinance in a community with housing, the effect will really be to put people out in the street in a sense without a commitment at the outer end to really do

something massive with HUD. There is really no sense in pushing people out of their houses, but this is a logical end of really enforcing, getting the lead out of walls. Perhaps 99 per cent of the inner city of Sanford has more than 1 per cent paint on its walls. And we would love to see that eradicated. Unfortunately urban renewal works very slowly and all that happens is people get shoved around. I think someone said back here we have to reorganize priorities. And I wish somebody up there would tell us how this is done. In Washington they seem to be more concerned with putting people on the moon, dropping bombs on Viet Nam instead of cleaning up the mess in our own back yard.

MR. STEIN: I think I disagree with the assumption which becomes an assumption without determining empirically whether it's true or whether other factors cause it by enforcing a housing code or lead poisoning ordinance you put people on the street. If you have a good retaliatory eviction ordinance that protects people, that people know about, that they exercise, that will prevent, as it's

written in the Pennsylvania bill, as it's written in the Philadelphia ordinance, that anyone against, and Wilmington, it prevents someone's rent from being increased, eviction or any modification in the lease, puts the burden of proof on the landlord if he evicts that tenant within a year of the tenant complaining about lead poisoning in his home. So, you know, there are things you can do to minimize the impact.

MR. THOMAS: Routinely and not on complaint and other landlords before you ever get to them decide that it's much better for them to rip down their housing and leave it as real estate. Now, this is that situation where we have a vacancy rate of maybe under one per cent. Only now housing is, a building starts at \$400.00 or \$500.00 a month and this is what landlords have decided, that it's much better to hold the land and wait until some apartment house or office building developer is ready to move it.

MR. STEIN: I am suggesting when there is pressure on realtors and landlords, economic pressure, you begin a process of bailing them out. They have an economic interest which gets expressed in

new policies. You have other people, tenants, you know, poor people concerned about housing, you know, who are an interested group too. And I don't think you could point to code enforcement and/or lead poisoning enforcement as a contributing cause of abandonment, or you know, tearing down of homes. I think it's a lot more complicated than that, and in fact, there has really never been any code enforcement in any place in the country.

MR. BATTAGLIA: My friend from Connecticut, I don't know what your situation is, but I can say I have been city solicitor of this town for three and a half years. With every new piece of legislation directed towards directing the housing situation we have precisely that argument made. So you may have a legitimate case in that situation. But we have been threatened with that by the landlords with every new piece of legislation, and I don't think it's worked out too badly so far. Maybe you ought to take a closer look at that situation and see if it's a realistic threat.

VOICE: I just want to make one

statement, the vacancy rate in these old cities, a lot of the housing a couple years ago in the city, like Chester, is only worth \$5,000.00 bucks or less. Now, today it's selling for somewhere between \$5,000.00 and \$10,000.00. It doesn't take too much to drive that landlord right out. And much of our property is owned by small people that own one or two properties that they inherited from their parents or something like that. So what the gentleman from Sanford is saying, I have to agree with. We are losing somewhere close to 300 homes a year, just abandoned.

The city ends up having to tear them down. So we lose the property, so what? So we try to delead the property. If we delead it and put a lien on the property, where is the city going to get its tax money back?

MR. BATTAGLIA: We all have that same problem. Wilmington is not free of the problem that you mentioned. But as I just indicated, every time we have had a new piece of legislation dealing with housing we have had the same threat and the same landlords. The only thing I can say to you, sir, is

that if you are running, if your housing situations that are contributing to the destruction of people's health, maybe you ought not to have those housing units. What are you doing about housing developments in your area? There are federal assistance which certainly we have been active in and so have most other cities, but, you know, maybe you have to make a decision as to whether or not you want housing or whether or not you want housing that is going to tear up somebody's health.

VOICE: Can I respond to that in just a moment? We are rebuilding homes and we are building new homes, those homes are for the poor, and those homes cost between 20 and \$23,000.00.

MR. STEIN: If you are serious about a serious expense of money for lead abatement and improving and getting lead out of homes, one might wish to consider combining that with a rehabilitation program to improve housing.

The Philadelphia Housing Authority in a very minimal way is using modernization money they have from HUD as part of the modernizing of units

or deleading, some deleading and you might be able to combine it with both.

MR. LIEBESMAN: I have a feeling this is going to be a very rewarding session, but unfortunately we do not have the time. You are welcome to have a cup of coffee, and we are going to resume in here at 3:30.

(Recess, from 3:20 o'clock p.m. until 3:35 o'clock p.m.)

AFTER RECESS

MR. LIEBESMAN: We are going to start seven minutes late with the last of the third sessions for the afternoon meeting and everything we are going to be talking about in this third session has to do with the preventative aspects of lead poisoning.

We heard first the legislators. We also had something to hear about housing. Now, we are going to have a chance, we are going to give a

chance to the industry to speak up in what is related with lead and paint.

The first speaker of this afternoon is going to be Mr. Jerome F. Cole, who is a doctor in science and Director of the Environmental Lead Industries Association of New York who is going to tell us about the industries' responsibility in the control of childhood lead poisoning.

(Dr. Cole gave his talk, not transcribed by stenographer.)

MR. LIEBESMAN: Thank you, Mr. Cole. I think Mr. Cole was right when he said the main problem lies probably in the paint, and for that we have an expert who is going to be our next speaker, who is Mr. Robert Laurell, who is going to speak on the problem of the lead paint.

A few words about Mr. Laurell. He is a chemist in the Marshall Research Laboratory in Philadelphia for the DuPont Company, which he joined in 1950. In 1958 he became department manager for

consumer paints, and in 1970, technical manager for the trade and industrial finishes. He is a graduate of Ohio State University, and he holds a degree of bachelor of science and master of science in chemical engineering. Mr. Laurell, please.

(Mr. Laurell gave his talk, not transcribed by stenographer.)

MR. LIEBESMAN: Thank you very much, Mr. Laurell.

Before I announce the next and last speaker of the afternoon, I want to remind you of two things. Number one, that following him we are going to have a 15-minute period of questions and answers. and that this meeting is going to continue tomorrow morning at 9:00 o'clock.

Our next speaker is Dr. Lloyd Tepper, who is the associate director of the Department of Environmental Health of the Kettering Laboratory from the University of Cincinnati, Ohio.

Mr. Teper.

MR. TEPER: Thank you, sir. The primary focus of this conference is concerned with leaded paint on walls of delapidated housing and upon the social situations which contribute in giving young children access to those walls. It's my assignment to discuss other possible sources of lead absorption by children and to attempt to put these other sources of lead in our environment in some perspective.

To be very direct, there are three potential avenues by which children or anyone else for that matter can be exposed to lead. We have been talking about oral routes today, oral ingestion of paint. Dr. Cole discussed the matter of hand-craft pottery, home-glazing. I think another context one could mention is illicit preparation of alcoholic beverages. Any of you from the Southeastern part of the country are well familiar with this. I might introduce here, however, some statements as to the average level of lead ingestion in food as is now consumed in our country. Our laboratory has recently been interested in this. What we have done is as

follows:

In eight communities across the country, Los Angeles, Philadelphia and New York, etc., we have had 20 women volunteers in each of these communities on a metabolic study for a 10-day period. What this simply means is that these women collected their total output of urine and feces for a 10-day period, and from this collected material we can determine the amount of lead in the diet.

How we collect this material, well, we have a secret weapon for that, and I won't discuss that today. But the fact of the matter is that we have had a very fine degree of collaboration. What these data show is the amount of lead in food in women is somewhere between 90 and 150 micrograms per day on the average. And I simply give you this number as representing the fact that food is somewhat cleaner than had been anticipated in some of the older data derived from the work of Robert Keyhoe and others. In other words, our food supply is relatively clean, and the amount of lead is relatively low, lower than had been anticipated. That is oral ingestion.

As to the matter of skin, we can very briefly say here that transcutaneous absorption of lead is of importance only in highly specialized situations where organic lead compounds such as tetraethylene lead is used, in general, and industrial situations. And there is no point in spending more on the matter of cutaneous absorption of lead at this meeting.

Now, the matter of air, lead in air. What does this contribute to lead absorption? And I would like to devote the balance of my remarks to this particular avenue by which lead is absorbed.

We will be talking about two things here in particular; mostly about ambient levels of lead in urban and suburban and rural areas. And how much lead is in the air of these areas and to what extent is the level of lead in these areas reflected in people who live in these areas. And then at the end I will talk about the El Paso situation which has appeared in the public press and is sort of a highly exaggerated situation which illustrates how air-borne lead can be a problem.

With respect to our studies of lead in the air, what we have done, we have set up at about 10 to 20 locations in each of eight communities across the country an air sampling station. If I might have the first small slide, please.

This is a housing for an air sampling station. It consists of a pump which draws air through a filter paper. Lead is a particulate which is trapped on the filter paper, and this is subsequently available for analysis.

These instruments have been running over the course of a year and they have been placed strategically in cities to give us a notion of what occurs in the highly urbanized areas and in rural areas as well.

This particular instrument is located in the roof of a Northern dispensary in Greenwich Village, New York. This particular area was selected because it represents an area of high vehicle density, high population density and certainly if one is worried about air contamination, this is a pretty good place to look.

We have highly specialized equipment which shows you how we find access to the rooves of some of these buildings.

The next slide represents a somewhat different environment. This is our only foreign station. It's located at the Swiss Embassy in Washington, D. C., which is in the middle of a residential area, and yet an area not removed from the heavy concentration of traffic from Connecticut and Wisconsin Avenues.

Now, in a number of these sites we have attempted to establish a population living in geographical proximity to the station. In other words, in the area surrounding this station in a one-mile radius, approximately, we have solicited the cooperation of women who have lived in this area for at least five years. We have worked very largely through church groups, women's groups in churches, leagues of women voters, other similar civic and other church organizations.

The reason we have worked with women is, this is really done largely in the pre-liberation

days, I guess, we felt that women spent most of their time in this geographical proximity to a sampling station. In other words, they were not running off during the course of a day to another place and, therefore, the amount of lead in these individuals would represent the amount of lead in the air at a place where they spent most of their time.

Secondly, the women who were employed were generally employed in the professions of teaching, secretaries, and they were not employed in the lead-using trades. They were not steamfitters, they were not truck drivers, they were not welders, they were not gasoline station attendants. So by using this little epidemiology dodge, we thought we could identify a particular population.

The first large slide will give you some idea of where we try to run these particular studies. I have picked out two slides which concern themselves with an area well-known to you. We could have used Los Angeles, Houston or Chicago, but we picked Philadelphia and New York simply to give you an idea of how these stations were sited and then give

you some opportunity to infer from the location some nature of the environment and the purpose of the study.

Well, this is Philadelphia. And Station No. 18 is Rittenhouse Square, located on the balcony of an apartment. We felt this represented a good center city location where air could be easily measured.

This air reflected high population and vehicle density.

Stations 19 and 20 are located in Ardmore and Wynwood, respectively. Peaceful, quiet suburban neighborhoods, high real estate values, low population density, low motor vehicle density, and lower levels of lead in the atmosphere.

The next slide would depict the corresponding situation for New York City. 85 is the Greenwich Village station on a northern dispensary. We were interested in the blood lead levels of the population living in Greenwich Village. There are legitimate populations living in Greenwich Village who have lived there for five years or more in that area and not some place from which they had moved. So we

I had the people who lived in Greenwich Village, 85, and then 88 and 89 out in the upper right-hand corner, this is Port Washington, which again is a suburban area off major vehicle roadways, and we thought this would represent a very neat pairing of populations to determine the influence of the respective levels of lead in the air on populations living in those areas.

Now, this is a pair. This is Greenwich Village versus Port Washington pair.

In Philadelphia we had a Rittenhouse Square versus Ardmore-Wynwood, decidedly urban, decidedly suburban, and we did this in other places as well, but I am using these as examples of how this was done in these areas.

Now, with respect to our use of women volunteers, we have been criticized up and down on this, because they were not youngsters and there were no men in the sample, etc., etc. And I simply have to reject these criticisms, but these have nothing to do with the epidemiology of the nature of the study. They were living in particular kinds of

areas. And we wanted to confuse the issue as little as possible. Therefore, we were not interested in males and we were not interested in children. And we see no way in which we could have contributed to the validity of the study by incorporating highly heterogenous people in the sample. Take that for what it's worth.

The next slide will give you some idea of the kinds of findings. This is a plot in which lead in blood is measured against lead in air, in micrograms per metered cube. The cleanest area, in other words, the lowest level of lead in air occurred in our station in Los Alamos, New Mexico, which is sitting up high in a mesa top, and there is no particular problem there. And in Los Alamos the level of lead in air is .17 micrograms per metered cube. This is averaged over a year.

This little place called Okeana, that is sort of a synthetic geographic, it's a farm town near the Indiana-Ohio line. The concentration of lead in the air there was about .3 micrograms per metered cube.

Now, at the other end of the spectrum, as would be anticipated by anybody who watches cars, would know that here is Greenwich Village and then out here is somewhere above 3 micrograms is Pasadena, a residential area. The fact of the matter is, one of the instruments in Pasadena was located on top of the engineering building at Cal-Tech.

The point of this particular slide is simply to illustrate that the amount of lead in the air does not influence greatly the amount of lead in the blood. In other words, these people are exposed to ten times the amount, more than ten times the amount of lead in the air as are the Los Almos and the Okeana populations. And yet the levels of lead in the blood are reasonably similar. By reasonably similar I mean the Los Almos people are about 15 micrograms and the Okeana people are 16, and the Pasadena people, way out there on the extreme right, were about 17 and a half. So this points to the fact that we do not find broad ranges of blood lead levels according to the kinds of atmospheres in

which these people live.

The highest level occurred in Rittenhouse Square, and that was about 20 and a half micrograms per metered cube, representing the mean blood lead level for women living in these areas.

The number in parentheses after each location represents the number of people involved. And you see we are talking about 100, 200 people. So these are good-sized samples which give you solid statistics towards this kind of study.

Now, I suppose one could -- let me inject here, we did this metabolic study to determine whether or not lead in food could explain this particular phenomena. In other words, it could be possible that these people had a relatively low blood lead level, because there was very little lead in their food. And maybe these people had a lead level as high as it is because there was a lot of lead in their food. In other words, this represents a great exposure to lead in the food and lead in the air, and maybe what we are really seeing here, a straight-line, is due to the fact that these people had a

small contribution from the air, but a big contribution from the food; these people had a big contribution from the air and a small contribution from the food, and therefore, any difference would be washed out. (Indicating.)

Does this make sense? I hope so. At any rate in our study of fecal samples in these populations, there really was no difference of any significance over the country in lead ingestion and therefore we cannot say that there is a compensatory mechanism of lead in food which explains the lack of response here to lead in the air.

Now, I suppose one could make an interesting observation here, and that is that if in a given region if you pair the urban and suburban populations the urban population is a wee bit higher. For example, here is Greenwich Village and here is Port Washington. Now, this is higher, higher blood lead level in Greenwich than in Port Washington here. (Indicating.)

The same thing held true in Philadelphia. Here is the Rittenhouse population, slightly

higher than the Ardmore population. Chicago, what happened in Chicago? Well, Chicago, this is Bridgeport, which is the back of the stockyards in Chicago, and this is Lombard which is a suburban population west of Chicago. So there may be some increase in blood lead levels in people who live in urban areas. I am not sure what this is due to. Conceivably it could be due to lead in the air, but the order of magnitude of this is one macrogram, one-half microgram.

The next slide will illustrate that this is about the same order of magnitude as the effect of smoking. I guess this is not the world's best slide, but it shows the populations which were samples. The first column is non-smokers, previous smokers or people who have given up smoking, and the final column are people who are still actively smoking. And you see almost in every instance the smokers have considerably, well, they have one or two micrograms per hundred grams of blood higher blood lead levels than do the non-smokers. In other words, the Cincinnati, Okeana people, they were about

17 micrograms, and the smokers were a little over 17 micrograms. Philadelphia, the difference is very small. This relationship seems to hold true.

Well, this is the matter of lead in air and what it contributes to lead in the blood of a particular kind of population which we were examining.

Now, I would like to switch very briefly to a very much different situation which has appeared in the news media, and between Dr. Chisolm and myself, I guess we can get it laid out straight this afternoon so you know actually what has happened and you will be able to view this with some degree of understanding.

For many years in El Paso a lead smelter has been in operation across a highway from a small, delapidated Mexican-American town called "Smeltertown," which has about 100, 103 families living there, largely of Mexican-American descent.

It was discovered some time last year that there was a lead absorption problem in the children of these communities. And when surveys were

done, some of these surveys were conducted with the cooperation of Dr. Chisolm, it was determined that the amount of lead in children living in these 100 plus families in Smeltertown was in general somewhere between 40 and 80 micrograms per hundred grams. There were a few children who were over 80 micrograms. These were not sick children. They were not anemic children. They were, in general, robust and obviously healthy children.

Studies have been examined by Dr. Chisolm and determined to be barren in some situation. Interestingly enough, the adults who have lived in Smeltertown for years have relatively normal blood lead levels, and yet it must be assumed that these adults when they were children had this kind of elevated blood-lead levels.

What has happened here? The adults have normal blood lead levels, the children have elevated blood lead levels, and it certainly appears that the children have this because they play in the dirt and the dirt in Smeltertown is over 1 per cent lead. This lead is not really fumes coming off the

factory. A lot of it is material which is blown off piles and has become disseminated in Smeltertown and sits on the ground and creates a very dusty situation. The children play in the dust, they live in their own little dust clouds, and from this, undoubtedly, they derive their lead absorption.

When the children grow up enough to get out of the dirt, apparently they lose their lead burden.

The smelter in question is operating in good faith in this area. They have taken great pains to alleviate what is regarded to be the source of lead absorption in these children. And one would anticipate that the situation would be effectively resolved over the next short period of time. We will be available for questions after the next speaker.

MR. LIEBESMAN: May I say before we have one more speaker, the apologies to Dr. Laur. I am just going to introduce him so he can go to his subject, which is going to be the further treatment and prevention of lead poisoning. Let me say just that Dr. Robert Laur holds a degree of PHD and is the

deputy administrator on the preventative consumer services in Rockville, Maryland. Dr. Laur, please.

(Dr. Laur gave his talk, not transcribed by stenographer.)

MR. LIEBESMAN: We have finally arrived to that moment where we are going to gather all of our thoughts together, but first I would like to invite all of the speakers to sit on the podium, please.

We are going to expose you to the questions of the panel, please.

MR. DODD: Ralph Dodd, Connecticut.. Dr. Cole, are there any other sources of lead? We have heard about the pigment in plastics that may involve lead and other heavy metals. Are there any other not so sensation sources of lead that we should know about?

DR. COLE: Sources of --

MR. DODD: You mentioned one, for example, plastics which are alleged to be heavy with

lead.

DR. COLE: I don't think on a widespread basis, no. The problem of old, delapidated interior surfaces, I think, is the major one which has any great widespread area. Let me give you an example of a case which happened in Houston, Texas. I think it was last year where some children did come down with lead poisoning, because they had been playing in an area which had been paved with old battery cases. Of course, this is, not a widespread situation, but every once in a while you do come across a weird thing that has happened, the Smelter-town incident is one. I don't know of any others. Pottery is somewhat widespread, but I don't know of any other sources, other than old lead paint which is any threat to a large population.

DR. HAMMOND: I have a very short comment perhaps regarding this question. I hope that we are all successful in getting the children free of lead, but please remember that they grow up and become adults. They have another type of lead poisoning which lead not only gets to the whole cavity, but

could enter the body through any route, and I call it instant lead poisoning. And it's a number one killer in violent deaths, and the source of it, of course, is from guns. And I hope you all pay attention to that, because that kills more than lead poisoning in children.

Regarding the added source, I received a few months ago a report from New York City indicating a problem with lead poisoning, the source of it being lead pencils. And, in fact, I disseminated this information among our colleagues throughout the medical examiner's office throughout the country. We haven't tabulated anything, but these cases have been reported, and I think is one of the sources of lead poisoning in children. They are widely available in the households, among children, and I am wondering if the industry has done anything in this area?

DR. COLE: Yes. You do mention the lead pencil thing. That has received some publicity in recent months. Where I disagree with you is that this has been a cause of cases of lead poisoning. I don't think that has been substantiated at all.

Perhaps Dr. Genee is here, he would comment on that, but the industry has recommended to the pencil industry that they stop using lead-based paint on these pencils, and the pencil industry has. It sounds like it's a great, huge industry, but it's not, and it has complied with that, at least according to what we know and are using non-leaded paints for pencils.

But in all of our files, which go back into the 1930's, we have never seen a case of lead poisoning which has been attributed to lead pencils. And we would like to know about it, Dr. Genee, if there is such a case.

DR. HAMMOND: I think the report I have perhaps occurred at the office of the Attorney General in the City of New York and they sort of, I think suspected that the source of poisoning in these two cases were lead pencils.

DR. COLE: Undoubtedly there is a source, there is lead in paint in pencils.

MR. LIEBESMAN: If I may, something I would add that I think Dr. Hammond is correct, not

only have I heard of a couple of cases of lead poisoning of pencils, but the Chapter of American Pediatrics through Dr. Kidd has published an article warning people about that somewhere, I think in October of last year in the Weekly Post published in Newark. I am proud of that.

A VOICE: I would like to address my question to Dr. Cole. I think the rationale of this question is obvious, if we are going to really get into the business of preventing various forms, we are going to have to find out where that lead is going. That is where the industries that are concentrating in natural sources of lead and redirecting them in products, and so we have to identify all of those products, it would seem to me, and see if any of them have potentially dangerous consequences.

I am partially prefacing this by our, rather, one of my assumptions is that perhaps the levels of blood lead that do not cause symptoms, do not become obvious and that people in medicine become alarmed that these may be having the lecherous consequences, and this kind of evidence may be coming

down the road.

My question is this, do you think this would be a -- do you think it would be appropriate to approach the lead industries and ask them for the sources of all of their consumers of lead and take a look at all of those products, open this up to scrutiny to see if all those products may have deleterious health effects?

DR. COLE: That is almost an unanswerable question, because if you have ever looked at the number of uses of lead, it would be nearly impossible for any industrial organization such as our own -- I am thinking of our own association -- to even approach that kind of a problem to try to answer that question. We could see what could be done.

A VOICE: You are the people who have those lists. You are the only people who have those lists as to who is buying lead and how they are using it.

DR. LAUR: Any industry that uses lead or mercury or fluoride or virilium or benzene or

whatever has an obligation to examine what is going to happen with respect to in-house workers and the consumers and the fact is that they have been doing this for many years. And the other fact is that the new occupational health legislation is making it urgently imperative that each of these industries show the chemical effect on employees and the public be examined in considerable detail.

A VOICE: Dr. Cole said it's impossible. You said they have been doing it.

DR. LAUR: Dr. Cole said for his organization to make a list of every item which is sold by members of the association. It's the responsibility of the users to without proding from a trade association, do this, and if they do not do this, I assure you they are going to be in plenty of hot water.

A VOICE: Along those same lines, we hear for the first time that the FDA is proposing legislation or regulations for lead content in paint, yet we keep hearing if and when this comes out. What is the hang-up? We hear from DuPont that it technically

is feasible, yet we hear from FDA that maybe it might come out.

DR. LAUR: This is not a hang-up at all. This is a meeting or hearing where members of the public and of industry have an opportunity to contribute to the decision-making process, they can tell their respective views, and then regulation is enacted.

A VOICE: Isn't the period of the hearing over?

DR. LAUR: It's over, but objections have been filed for the proposed standards.

A VOICE: So once again we go through this business of having products available until all those objections are clear?

DR. LAUR: I don't know how it could be done over, sir.

A VOICE: I would think that the levels that have been set, that have been suggested by the FDA have been suggested by reasonable people.

DR. LAUR: The .06 level has a distinct quality that makes it attractive. It was not

drawn out of a hat or viewed in a crystal ball as many other regulations have been.

SARA RODGERS: Sara Rodgers, Public Health Nurse.

Is white lead so rare a metal that it could not be generally available to your professional painters still to add when he is mixing paint so that the problem of control might be very, very, very difficult?

MR. LAURELL: That problem has to be eliminated along with the initial production of paints along the lines we were talking about.

MISS RODGERS: And outside paint that is clearly labeled but that landlords use as interior paints can still be a primary source.

MR. LAURELL: That's right.

DR. COLE: There is one other source also. There are a number of hardware stores and paint outlets who custom-mix paints and add pigments in their own right. I don't believe -- well, I guess current legislation does prohibit this, but it's awfully difficult to control.

MISS RODGERS: Is there any way that at a present time a consumer that has bought some paint which is supposedly, you know, not made by DuPont Company, as we heard this morning, that it's safe to use, can they get that tested in any way? Does the FDA test on consumer request the same with pottery, with glazes that somebody intends to use to serve food which is being sold widely, can they be tested in any way by request?

DR. LAUR: I don't know the answer to that, but I am sure some of the HEBW people do.

DR. COLE: I can answer the one about pottery; yes, the Food and Drug Administration is testing pottery. They have a program for testing not only for imported, but domestic potteries.

MR. SHALL: Baltimore Branch Laboratory. Does paint scraping seem to be a great problem at the moment? And I think one point should be cleared up, Dr. Chisolm about 16 years ago mentioned that the 1 per cent lead in the dry paint film was only a pertinent figure if it was one or two coats of paint. And five or ten coats of a 1 per cent

lead can be a deadly amount to a child.

If you take the DPI, the daily permitted intake of 200 micrograms of lead and say a child ingests a hundred through food, drink and air, but 100 to 150, say, it's a hundred, that gives him 200 micrograms that he has got left. While, 1 per cent, 1 coat of one per cent lead on the average -- we have done tests in the laboratory -- will give you about 100 micrograms. So if he is chewing on the surface that has one coat of 1 per cent, he will get one-half of this spare amount. If he has got two coats, that is about all he can afford to take in. If he gets ten coats, he has got a rather excessive lead surface. From a chewing child's point of view, the only true criteria is not percentage, it's the micrograms of lead per square city meter, and that should not in my opinion exceed about 500/100ths micrograms per square city meter, which is the, over the DPI, but it's a practical figure.

Now, the Food and Drug regulation is a ridiculous thing, if I may say so, the .06 per cent. Well, 1 per cent is a hundred micrograms per city

meter. A 10th of 1 per cent is only 10 micrograms per city meter. And .06 is 6 micrograms. It would take 30 coats to exceed your DPI, and why burden that industry with that ridiculous regulation. I am not a spokesman with the paint industries. I have been working in the lead paint business for a number of years, but to me that is going too far.

And at the same time, just one or two little things have been said about exterior paint. Just a month or so ago, one of our people in the health department went out and took one square inch samples from the exterior. Now, remember we were looking for 100 micrograms per square city meter. Here we found a milligram, 10 times it. We found 20 milligrams per square city meter. We found 40 milligrams per square city meter on the exterior walls, stoops -- we call them stoops in Baltimore. I went down on one small area, I went down to 12 steps, 10 of them were just loaded with lead.

So when you have these old slum dwellings that have that high amount of lead, to settle on a .06 per cent and burden industry and cause

a lot of paperwork and everything else, it seems a little bit excessive.

I am against all these things about getting lead to such a low figure and I think it gives industry a terrible headache.

MR. LAURELL: There have been many comments of this same general nature, analyzing this problem in the past. All I can say is that DuPont has accepted the fact that .06 is the standard that we will shoot for, and we think it's technically feasible to do it because of contact. We are willing to try it.

A VOICE: You are saying that you, and then you gave the example of the smelter city and so forth. Did you check the soil in these areas where you also took air samples?

MR. LAURELL: No, we did not. Since we did not consider this would have relevance to the exposure of the adult women living in these areas. It may be that one is concerned with children who are playing in dirt and playing in areas immediately surrounding the walls of houses, which may contain chaulked paint residues. This is an entirely separate

situation and would not exist in our epidemiological order.

A VOICE: This is true except for the fact that children are at risk, they are playing in the soil, they are putting their hands in their mouths, they have a level between 40 and 80, between the ages of 1 and 6 years of age. The damage would be done. We really don't know what kind of damage would be done. Because by the time they are adults, the damage is done.

MR. LAURELL: You are absolutely correct, but this has nothing to do with the kind of study we were conducting, and I took special pains to point this out.

MR. SIBLESKY: Walter Siblesky, Philadelphia Health Department. Abatement procedures are extremely costly, but we have heard of a product called simprol, and I am only wondering if any of you people on the panel accept from DuPont a product from Westminister, California, that is supposed to serve as a coating? And I am wondering about the toxicity of this product and the durability? We appreciate any

information we can get regarding this particular product.

MR. LAURELL: I am not familiar with this product specifically, but we have heard of a number of products of this type which I alluded to in the remarks I made earlier. I have no information on either the effectiveness or the additional dangers that these might add in themselves. So I'm afraid I can't really elaborate on what I have already said.

MR. SIBLESKY: This was a coating that was usually used on exterior of buildings, bridges and it had to be sprayed on. And the literature indicates that they had a product that they could be rolled on or painted on interior surfaces, and the hardness and bonding is better than any other paint on the market or any other coating.

MR. LAURELL: I am not familiar with that.

SUSAN REGAN: Susan Regan, Bureau of Health. Why is it that states are restricted from applying for the federal grants for lead poisoning programs, and is there any further development -- I

think it was Senator Kennedy who introduced the bill to provide for states. Can you tell us what is happening to that and will states be allowed to apply?

DR. LAUR: I would really like to bounce that to somebody who knows the answer, because I don't know the answer.

DR. ROBERT NOVICK: Dr. Robert Novick, Director of ZCN. Well, I think it's quite simple, I think it represents Senator Kennedy's interest in seeing that the money goes directly to the cities and to your legislature which he had a lot to do with in the development last year.

There are amendments to the legislation pending that would allow states where there are no open health programs, I think there are two states like that. In Delaware amendments are pending to allow these states where there are no local health departments to be recipients of grants. Also, there has been tremendous strides in the House version of the legislature to provide for states to receive funds.

MR. LIEBESMAN: Thank you very much. Before we adjourn, because I'm afraid we keep on

going, we could be here for more than two hours. Let me thank very much all the speakers we have had who we have enjoyed very much. I want to thank you all. You were a wonderful audience. I am sure that you also enjoyed this meeting, and if it's true, like somebody said today, this is like a church, and all the members are here, I want to remind you that services will be again tomorrow morning.

(The conference was adjourned at 5:10 o'clock p.m.)

SATURDAY, JUNE 3, 1972.

(Conference resumed on Saturday,
June 3, 1972, beginning at 9:00 o'clock a.m.)

DR. McKUSICK: Good morning, everybody.

I am Marjorie McKusick, and I am welcoming you once again to the Eastern Regional Conference on Childhood Lead Poisoning. Today we are going to take a look at the role of the community and also how we can enlist the support of the mass media, primarily television, that we will be discussing in the latter part of the morning. I feel as though we ought to continue on the same vein as yesterday. We are all believers and I think that the message that came through very clearly yesterday was that what we need to pray for is money. We are fortunate in having as our moderator today, Dr. Edward M. Sewell, who is the Director of Health Services for Philadelphia Public Schools.

Dr. Sewell is well-known in this community because he has been a consultant for many

years to the Wilmington Medical Center. He received his MD degree at the University of Pennsylvania and interned at Harlem Hospital in New York City. His residency training and subsequent staff work for many years from 1948 to 1970 was at Children's Hospital in Philadelphia. At the present time he is associate professor at the University of Pennsylvania, specializing in TB and chest diseases of children, and it's in this capacity that he advises us in Wilmington.

I think about the last two or three years he has changed his hat and is director of health services for Philadelphia Public Schools. I understand he is also known as the tooth fairy, having been involved in the detection of lead in insidious teeth of school children. I am very happy to present our moderator, Dr. Sewell.

DR. SEWELL: Thank you, Dr. McKusick. I am not quite sure how I react at this moment, because this is the first time I have been introduced as a fairy of any kind. But one changes one's role so often these days that it's rather difficult to be sure of where you really are. After all, what is a chest

physician doing addressing or even participating in a panel on lead poisoning? I don't really think there is any chest disease which is caused by lead poisoning, caused by lead. But all of us who work in medicine these days realize that the number of serious problems that the physician can correct by his action and in his office or his hospital is growing less and less. As we get better control of our infectious diseases such as tuberculosis we become confronted with problems in our patients that have origins in the environment and in the community. In our attempts to help them, we will be successful in direct proportion to the extent to which we are able to correct the environmental and community problems which give rise to them.

The Tuberculosis and Respiratory Disease Association of which I am a member has recognized that its activities must extend beyond the narrow fields of tuberculosis and emphysema and that we must be concerned with problems of the environment and that is why you will find that we have become concerned about the problems of inhalent sources of lead in our industrialized gasoline-powered community.

The past two years of involvement with the school system in Philadelphia reflect my realization that the problems of the pediatrician, like the problems of the general physician, are more related to community problems and environmental problems, and the most effective way of coming to grips with this may be for me to get out of the office and get out of the hospital and to get involved with the bureaucracy, and the community actions as as exemplified in the large school city system.

I have looked over the program of yesterday's session and I can easily imagine that those of you who were able to participate in that session recognize that you have had the opportunity to hear from the nation's top experts on lead poisoning. To be brought up-to-date on the technical aspects of the origin, the distorted physiology, the diagnosis and the treatment of this disease. But we want to emphasize this morning that whatever we know about technology, diagnosis and treatment will prove of little help if we continue to depend on diagnosing children after they have been poisoned. The early

symptoms of lead poisoning are so non-specific, fretfulness, irritability, vomiting, how many little children are fretful, irritable and throw up every now and then, have poor appetite. If we wait for the occurrence of twitchings, convulsions or overt, full blown symptoms of lead encephalopathy, most of the children that we diagnose and treat will already have been irreparably damaged.

This morning's program will be directed to getting to the source of the problem, the lead which does exist in our environment, and talking about experiences which people have had in this part of our country in dealing with this in an organized fashion.

Your first speaker this morning is a lady I have known for some time and most recently as a fellow member of the Board of Directors of the Philadelphia and Montgomery Tuberculosis and Health Association. She is Mrs. Veronica Singleton, who has been wearing another hat for the past two and a half years, has been the co-chairman of the Philadelphia Citywide Coalition Against Childhood Lead Poisoning.

Mrs. Singleton has for a long time been involved with the activities of the welfare rights organization and she represents that organization on Philadelphia's coalition against lead poisoning. Mrs. Singleton's interest in lead poisoning is a very personal one, since four of her grandchildren had this as a problem. And she is going to talk to us about the community approach to the problem of lead poisoning control. Mrs. Singleton.

MRS. SINGLETON: Good morning, everyone. It really is good to be here this morning, so I can tell it like it is. I don't prepare any papers, because I feel that I know what the problem is and how it has developed and how we have to eradicate it. I have, like Dr. Sewell said, I am a member of welfare rights organization. A doctor came to us and told us about this problem. I will not divulge his name, because I haven't had permission to do so. But he has since left Philadelphia.

When he came to us we started a coalition in Philadelphia against childhood lead poisoning. That was in 1968. We started on it when

this doctor brought it to us. Well, since then, the Fall of 1968, I attended the American Medical Association convention that was held out in convention hall. Well, the doctors were there, a lot of doctors, maybe a lot of you were there at that time, but I was determined to get the lead poisoning problem into their resolution through another doctor, and also Dr. Lehr; he ran around, you know, helping me. So finally we got it together and it's in their resolution, but that is as far as it went. But it's in there. And last year I testified before Congressman William Barrett on HR 19172 bill, which is to eliminate lead paint poisoning. He and Senator Kennedy proposed this bill and out of it we are to get some money. I think it is about 75 point million, but you know that is just a drop in the bucket. In fact, it won't hit the entire country. Somebody will be left out, because it's not enough money, because some cities has it more than others, lead poisoning, because of their large capacity and the large amount of children. And I am speaking mainly of Philadelphia, because we know in Philadelphia we have 80 per cent of the homes that

have lead paint poison in them, this lead paint is there.

All right. Now, I had spoke to the health department in Philadelphia stating that at the last meeting that we have to get to FHA or anyone who is selling these homes, we have got to see that they test these homes before they sell it to people with children. The problem is why people are buying homes for children is because a lot of them are on welfare. And don't get me wrong, they have to sign the lien over to the city once they buy the house, so they are just holding, I should say, just the steps to walk on, because the rest of it belongs to the city.

Well, they buy these homes because a lot of realtors will not rent to people on welfare in Philadelphia. It's hard getting a place unless it's delapidated. So this is what has happened. These people are buying these homes and there is lead paint in them.

Now, Dr. Pope was always concerned about the homeowner. Well, if these houses were inspected before these people buy these homes, then

we will not, the homeowner is not contaminated or the children aren't, but let's look at the people that rent. The people that rent these homes, they are the ones that have to contend with this lead problem. And it really makes me mad, because the real estate are asking for \$125.00 down for their little apartments. One woman lived on the third floor, she paid \$125.00, her child contacted lead poisoning. When the health department sent her a letter to remove this paint, she gives the girl an eviction notice because she said she can't do it.

Now, this is not fair to her or the next child, the next children who might live in this home, because they are going right into the same environment where the children were poisoned before. So I intend to see that this does not happen in Philadelphia.

I called the health department whenever I find out a child has lead paint poisoning and I also tell the mother when she notifies the health department that she is moving so this house can be posted unfit, because the next child might

become blind or mentally retarded. So this child might have a slight kidney ailment from the lead, but it might be more serious for the next child. So I am very concerned about this situation.

Welfare rights went to city council and we have appealed for money. So out of it came \$600,000.00 for starting a program. But Mayor Tate, our mayor, seen fit to freeze it so that left us without funds. When they had their meeting at city hall, I went to them and I asked them would they please release the money, because we need it now. Our answer to my question was, "You have to see the administrator."

We know Tate had already froze the money, so why should we go to him? I think they should have been men enough to get up and say, "You need that money because this is a solid epidemic that is hitting Philadelphia." But they didn't say anything, they just sat there and this made me real angry. So later on we asked for the money, we didn't get no money. But we were instrumental in getting a program started in model cities by kicking and arguing, and they have a program, but it does not hit the entire

city. This is what we want and this is what we intend to have, the entire city children screened, and we also want those homes screened.

Well, I have gone to Washington on March 9th, and I have testified before Senator Ed's committee on reducing the amount of lead in the paint. That wasn't enough. I said, we don't need any lead in the paint, they can find a substitute, because in years to come maybe somebody will paint a house, maybe today and maybe somebody move in next month, and they are going to paint the house over, because the turnover is great in Philadelphia with the homes, and they buy this paint. The paint, it mounts up, and maybe they get to the fifth family moving in, the child gets lead poisoning. So we want to do away with it once and for all so it will not come back.

It was a nice meeting until the paint industry came in. I had a beautiful statement all written up. There was 12 of them, I think. I had a beautiful statement all written up. I said, I am sorry, I can't say it, and I got to tell it like it is. So I went on telling them how would they feel if their

child was poisoned through lead and their industry was the one that put out the paint? Oh, they didn't put everything in the paper, I said, because maybe it was a little too strong, but I let them have it like it was. And I also felt that if the paint industry thinks about the almighty dollar more than a child's life, they don't need that paint industry, they don't need it, because a child's life here is at stake and a child's sight is at stake and it takes more to take care of a mentally retarded child than it does to remove the lead paint in the homes.

Their criteria was, oh, it's the old paint. We know it's the old paint. But why add more paint to the old paint and knowing that when it gets on the lead in the paint is going to seep to the top and the walls are going to crack when it gets hot, because I have seen this in Philadelphia. We know that these walls are going to crack and chip from the old paint, and we also know that paint is in the plaster, not only around the doors or the window sills, but it's also in the plaster, because they are painting over the walls and you know the plaster is the next thing in

line after the paint, so it's in the plaster.

So when they inspect they don't inspect the plaster. The walls, they say, the doors, the window sills that the children can reach, but how about that baby that is in a crib next to a wall and it might chip and this baby doesn't know any better, say one year old, doesn't know any better, but to take that little chip and put it in his mouth. So something has to be done about the walls also. They have to be tested, because a child, like I said, has a room of its own in a little crib, they don't know any better. It's their prerogative to put things in their mouth.

And I went to Washington, and one doctor was stating perhaps a child was hungry because he put things in his mouth. Well, really, that made me mad, because I said, you, me, everybody else when they were a child put something in their mouth at one time, not knowing what it is and what the dangers are because they have no sense to danger at that age. So then I went on stating that it's important instead of talking about whether the child is hungry, get to the job, get it done, don't sit back and talk or go in a

closed door and talk about what is to be done and don't do it. I think everybody in this room out there in the community should get involved and also if you have to go stand on a mountain top, just tell it like it is, because it's a serious problem.

It's a man-made problem. The landlords and the tenants' problem, mostly the landlord, they give them ten days to take it off in Philadelphia.

All right. How about if the man happened to be sunning down in Florida, the owner, or fishing up in Vermont? Ten days and he don't receive the notice. You go to the realtors and tell the realtor, look, the paint hasn't been removed. He said, oh, I can't find the owner. Yet and still that child is still in that house with that lead paint in it. So I think something else should be done other than giving them 10 days, because the owners cannot be found, because I am a witness to this. If they can be found, they don't leave the name at the realtor, and the realtor don't want to bother the owner, because that little percentage is coming in. And this is not right. Because if they have a delapidated and

they know it and they are getting a hundred, say they are getting \$85.00 a month for the house, they just have to pay taxes. But if they get sued, they are going to have to pay more than they paid if they had taken the lead paint off when they were notified.

We have a case now against public housing. Public housing has lead paint in it. We have a suit now. We are waiting for the outcome. So we have had several meetings with the health department in Philadelphia. I have worked on this program, this lead problem, for a long time, and I don't intend to stop. I will keep on going if I have to go and sit on the President's head. That is what I am going to do to try to correct this problem.

I have gone on TV, I have gone on radio, and I have told them like it was. I have given the mothers the symptoms of the problem. Out of that one child came to citywide council and they said they heard me on the radio station about the chipped paint, so they called citywide. Citywide said, take your child to the nearest health center. Sure enough that child has lead poisoning. That is one out of a

hundred, because we know a lot of mothers do not take notice to the children right away. Why? Maybe some of them are listening to Search for Tomorrow and the child's eating paint. So this has to be. You have to reach the mothers. Flyers will do no good.

I have some flyers here, and when I come to welfare rights office I will pass them out, tell them about the danger.

I have a little booklet here. I am not using no big words, because I don't know the answer to them myself, and I don't expect them to know it. So I have these little leaflets I give to the mothers when they come to welfare rights. I intend to get in the street with these. I am trying to get a speaker to get out in the street, and I mean to rouse every parent in Philadelphia from street to street, corner to corner, because they have to get involved. They have to go out and help.

I mean, the ones that say, I don't have any children, it won't happen to me, they have grandchildren going into that home, they have nieces, they have nephews. All of them from 80 down to 18 has

to be involved. We have got to get involved. We can't let this thing linger on. We can't wait for no federal money, because knowing our President, we might not get none. But we have got to try some other means of getting the money, if we have to go to anyone, any foundation for anything to help us. Each one of us in our cities can go to a foundation and ask them to help us, so we can get a program started instead of depending on the federal money, because you know our President went to Moscow, we don't know what is going to happen the next six months, but nevertheless, we have got to get started. We cannot wait for no money. We can't sit back and wait for the money.

If we have to just start out by educating the mothers, by writing clippings, statements every day to the papers, getting into the radio, give it out, because like I said, and also you can't depend on the radio and the newspaper, because a lot of people cannot read, a lot of people do not understand. So we have got to meet them face to face out in the street, anywhere, and tell them about it, tell them like it is, because flyers, you know, flyers get lost

somewhere along the line. You put them in the door, some little child comes along and makes kites out of it, so the parents don't get it.

So we have got to do it by word to word, mouth to mouth, face to face. We have got to just get out there. Really, we need all the help of all the doctors, all the nurses, everybody, to try to eradicate this, because, like I said, I am not going to stop. Because we have got to do something. Because they are the future of tomorrow that is being endangered through no fault of their own.

We have enough mentally retarded children and incidentally I am going to get to them too, because I feel that they don't know why the child is mentally retarded. Maybe they should get on this program too, because lead poisoning will cause mental retardation. So I think we should link the mental retardation in with the lead poisoning, because that might have a greater, play a part in this mental retardation program, because they say, oh, they will just take a child and send it to school and give him some little trade to do, but they have not reached the

source of why this child is mentally retarded. Because I believe no child is born mentally retarded, it's got to be a cause why they are mentally retarded. They say unhappy homes, that is not necessarily true. A slow learner in school, that could be caused from the lead poisoning years ago that our commissioner said he had been starting on since 1958. I don't know where, because I didn't hear it before, until four of my grandchildren ate plaster. That is why I say, it's in the plaster. And I watch my children.

Dr. Sewell knows I got a son that works in the Children's Hospital, he got polio, and I caught that in time, because I notice my children, grandchildren too. He is not crippled, but if I hadn't noticed him, he would have been crippled, and I also made him get off the crutches through faith. So we have got to take two things with us when we go out. First is faith, the next thing is information, clearly defined, not big words. Like I said, a lot of people can't understand big words. Frankly, some I can't understand. The doctor's words. But I can break it down in my language. But that is what I think we will

have to do, break it down in everyday language so everyone can understand it. It's really important. That is the main factor that you have got to learn to do. If a child goes into a hospital and is poisoned with lead poison and the doctor treats this child or tells this mother that your child has lead poison, he has to take time and sit down, explain to this mother, because if not, she can't understand the big words. Maybe she doesn't understand clearly. But you can also give her a letter and maybe a relative can explain it to her, someone that can reach her.

I feel that the communities, the people in the communities themselves can reach the people in the community, not the health department, with a great big badge and say, I am from the health department, I want to test your house and the child for lead poisoning. Right then the mother's going to get up tight. She might not let them in. But if a person in the community gets involved and sits down and explained to that mother, I think the health department should have a mother in the neighborhood go around with them. Say, look, he is here to do such

and such, explain it from the beginning to the end what this doctor is going to do, what he finds, the danger of it and what to do. This should be done. I don't think a mother can just treat a child, tell him you have lead poisoning and take the child home.

There is one in Atlantic City, they keep the child down there until the house is deleaded. Here in Philadelphia, if the owner don't take the paint off in 10 days, the child leaves the hospital and goes right back in that same house. The danger might flare up again.

So I believe we have to do something about the ordinances all over the country, in your state, my state and everybody's state, stating that we have got to have the lead removed immediately when the child has been found to have a high blood level. Not wait like Dr. Sewell stated, not wait until the child is poisoned. I think we should start a program and we should go from house to house, survey, like they do in the census. They have people going out and taking the census. I think the same way should happen to the lead poison problem, take censuses and go around

and find out if that child has lead poison, look at the condition of the home, and tell them, well, I suspect that lead poison is in the house. Test it. It's not going to hurt to test the home.

They say they have a machine to put it right to the wall and see if there is lead in it. So that don't take you but three minutes. So why not get out there and do it. I feel that they should get out there and do it, not talk about what they got or what they are going to do. It might be too late.

So I think they should do all this before a child gets poisoned. I always said every house should be screened. Every child should be screened. It takes time, but frankly enough, I would do, I would go out there from house to house every day, even up to 12:00 o'clock if need be, if I find that a woman calls and tells me I suspect lead in the house, or my child is sick, my child doesn't eat. Sure, sometimes this is not the cause. We might get it confused, but why take a chance to wait and see if it's not the cause. We have got to be sure that it's not the cause, this lead is not the cause of this child

being sick. We should not wait until the child is sick and then say, well, take it to the hospital, he has a high risk of lead. It's too late then. Do something before the child is poisoned.

And like I said, I have gone around, I have talked to people about it, but I haven't done enough yet. Because I intend to get a speaker and hit Philadelphia streets, and I intend to get every mother, if I have to knock on the door, to get out there and listen, because it's to their own good and to the child's safety that this has to be done.

Maybe a lot of you don't agree with my tactics, but this is the way I like it and this is the way I tell it like it is.

What we have got to do, not say we think we can do it, don't think, do it. Because it's the only way you can do anything successful is everybody get behind this thing and push it, because that is why I went to Bill Barrett's committee and Kennedy's committee, because I intend to push it. And if need be, I will see the President, go down there and talk to him. It might not do no good, but I will

get the satisfaction of telling him like it is.

So that is what we have to do, and I wish that all of you understand that I feel very bad, not because of my grandchildren, all the children are my children, because it only happens to those in the ghetto area. I live in the ghetto area. The children are the affected, the Puerto Ricans and blacks, mostly, because we are the ones that have to live in these lead-infested homes, because we cannot move, like I stated.

If you have children, the first thing the landlord asks you, do you have children. You say yes, and he don't want to rent you that house. You can be the best housekeeper, your children can be the best children, but he still does not want to rent to people with children. So they take the first thing they can get rather than have the children out in the street. The result is they are probably lead-poisoned. So that is a situation.

And I appreciate Dr. McKusick having me here so I could tell it just like it is. I don't prepare nothing, because I feel that I know it and

like I stated, not because of my grandchildren I was interested, I didn't know about lead poisoning, frankly, when my grandchildren were affected. I didn't know nothing about it, but after the doctor came to welfare rights, I became involved and I will always be involved. I will go anywhere, any time, and talk and if they can stand what I say, they can call me back and I will tell them over again, because we have got to do something. The citizens have got to do something, along with the professionals, because the professionals, they skim the top, but they don't hit the surface, and the community can hit the surface of the thing, they can get -- excuse the expression -- the guts of the things and get it started, and that is what we intend to do.

But we need everybody's help with it, because like I say, a lot of things I don't know about the medical field, and I appreciate it if a doctor would tell me about it, so I know what I have to break it down to my own words to translate it on paper, but I still know what it is, and I can go out and tell the mother.

So I hope I wasn't a little too harsh, but I had to tell it.

DR. SEWELL: I certainly recognize that we have heard from Mrs. Singleton a bit of her personal experience. And we have heard from her a challenge, a challenge for action on a problem that is close to her and to many, many people. And as I was listening to you, Mrs. Singleton, the question that wasn't answered for me was not why you used the tactics that you did use, but how you were able to restrain yourself in the face of the frustration, the red tape, the broken promises, the availability of knowledge and techniques and lack of funds to come to grips with the problem that is really important to us. That is what I didn't understand.

MRS. SINGLETON: Well, you see, if I told it like it was, I don't think nobody couldn't understand, and they might ask me to go.

DR. SEWELL: Government, social agencies are trying to respond to the problem of lead poisoning, not as rapidly as we need to or as effectively as we would like to, but I think it's

important to look at what is being done and see what we have learned from this so that we can do more.

We are very fortunate today to have with us Mrs. Mary Lou Anderson, who is the health planner with the Wilmington model cities program. Mrs. Esperanza Parrish who is listed on your program could not be with us today, but Mrs. Anderson who is a pharmacist by background and a past speaker of the House of Delegates of the American Pharmaceutical Association will talk to us today.

She is a member of the comprehensive health planning council and a member of the planning council of the United Fund. Mrs. Anderson.

MRS. ANDERSON: Dr. Sewell, Mrs. Singleton. I guess I am that establishment type that sits in the point of view of government and expresses or feels that horrible frustration of lead paint poisoning.

When Ses asked me to stand in for her today and state the development of a model program for lead poisoning control, and I said, you have got to be out of your mind. I wouldn't begin to tackle that

problem. And I don't plan to. But let's give you just some background why in seven months Wilmington does not have a lead paint program in the model cities neighborhood.

Whenever a child that has been detected so far in the City of Wilmington has come from the model cities area. Some of it is lack of funds, but not all of it. Some of it is the responsibilities of those of us here in this room. I would wager that close to 100 per cent of the living conditions within the model neighborhood, except perhaps for some places up in Hilltop, which those of you who are not local may not be familiar with, have lead paint in them. The people, the residents, in the model neighborhood, have very few options about where they are going to go live. Since 1926 there has been limits in lead paint in the City of Wilmington of less than 1 per cent. That is better than most cities.

The sources of the lead paint that have been detected have been places like a day care center; day care centers in poor neighborhoods are

quite often old churches, parrish houses, things that Dr. Sewell and I were talking about before. It costs money to find a facility to replace a day care center with. We don't have those dollars, but our option is to close down the day care center. Then what happens to the working mother that the establishment wants off welfare and in training and on work? What happens if we say, cover it up, cover it up with plywood, anything, we don't have the funds?

The amount the State pays aren't enough to allow that in addition to other things. So we, quite often, turn to the Board of Health. We put everything on the back of the Public Health and the private sector, because it has a State Board of Health thinks it can walk away free and clear as long as the Board of Health has to do this.

In the little time that I have been familiar with Delaware, I have yet to see one organized medical group in the private sector go to bat for the division of physical health. Their budgets are limited, their staff is limited, their salaries are pitiful, their dedication is high. But nowhere in the private

sector are those of this in this "establishment-type" going to bat for the people that we say have the responsibility to do something for it.

In addition we have a 30 per cent transiency rate, 30 per cent of our homes turn over every year. How do we even track these people, and until lead poisoning is no health problem, I doubt that very few of us other than Mrs. Singleton or one or two who may live in the model neighborhood ever even worry about it. I have seven children and would never think about lead paint poisoning. It's not a health problem. It becomes one, but there are lots of other problems we face every single solitary day in model cities that aren't health problems; you should see the tin cans and the broken glass. You should see the traffic patterns through a model neighborhood where all we have are a few stop signs. What is our traffic accident rate with kids that end up terribly damaged? These aren't things that you and I have any real concerns about in our own children's lives. But none of us are taking on the moral responsibility of doing something about it.

The Delaware had another screwy thing happen when the legislation came down, Kennedy's bill that provided the money. It had to go to a local department of health. That made sense, they are the people closest to the problem. Delaware has a State Department of Health. We couldn't even get our funds. We had to pass another whole set of legislation which is sitting someplace right now, it's not through the house yet, because the first piece of legislation required -- well, we are finagling around the red tape, but it's the kind of red tape that Dr. Sewell recognizes if he is in governmental agencies.

So we have no program. And we have no program, really because we have no funds. But we also don't have a lot of other things. We don't have many options, and I am terrified to go out and do an education job that creates fear and apprehension until I have an answer to it. I think we have done this with sickle cell anemia all over the country. We went out and educated what it was and we had no back-up to do anything about it once we did the education, and I am afraid of that in lead poisoning.

I don't know what you do if you tell 100 per cent of the community that they are living in lead-poisoned buildings when you have got no option to do anything about it at the end. I don't know if that is moral.

The only thing we were able to do at the day care center was try and get a little more staff and watch the kids so they weren't eating dirt off the floor. It doesn't seem like much of an answer, does it?

So I really don't know if I have earned my salary the last seven months. I recognize the problem, we have started to quantify it, but we really don't have any model plan for lead poisoning control. Thank you.

DR. SEWELL: Thank you very much. We have heard from the governmental side of things, but after Mrs. Singleton concluded her remarks, I said that in both the governmental sector and through social agencies we are beginning to see the starts of efforts to help with the lead poisoning problem. I think we are particularly fortunate to have with us today Mr. James Baker who in a relatively short period

of time has had broad experience in a number of social and community agencies and has been directly involved with the question of how does one bring the resources of the community and its people to bear on the community's problem.

Mr. Baker is a native of Ohio, and after some years in our Air Force, he came to Wilmington in 1966 to work in the VISTA program. He did community organization in youth and was a member of the Community Services Council of Delaware. He participated as the administrative assistant in the WYACK program and a member of the Northeast Wilmington Federal Credit Union, a deputy director of model cities and its division of social and human development in the Mayor's office. He is presently with the community development program in the Kingswood Community Center. Mr. Baker.

MR. BAKER: When I was asked to do this, I really wanted to chicken out, because this is the first time, I guess, I get a chance to tell doctors something. I always have been told something by doctors, and I never have been able to say anything

back because they are supposed to know more than I do. But I find that it is quite interesting that you have this broad number of people and you wonder why nothing ever happened before when it comes down to a particular problem. And I think the basic reason why things don't happen is that we are too specialized.

As you can see, I guess I float about to everything and consider myself more or less a generalist rather than a specialist. But I cannot understand why, if this is such a problem, such a big problem, that we don't reach out to people in other areas. The medical profession is to me a secret sect. The only time I get to read anything about medicine is in the, what is it called, the Medical Journal, something like that, when I go into a doctor's office.

And yesterday I was totally confused. I kept hearing a whole bunch of words about ten miles long, and I was trying to put them together. And when something had hemo-something, I knew that was supposed to deal with blood. but I didn't know what else it meant. And I find that the biggest problem that the medical profession has is that it has no way or has

not attempted to interpret its language to people. It talks among itself, but it never goes out beyond its own realm.

Nor do they really reach to a community beyond just the professional connections that they have. Most of the reports that have come out about the American medical system has said that it's in a deplorable state of affairs. And I am inclined to believe that, because when a man gets sick, when a woman or child gets sick, for every section of the body you have to go to a different person to get it treated.

When I had my first occasion of ulcers, I went to the doctor. He said, well, that is fine, you probably do, but we have got to check it out. I had to go to, what do they call it, a gastro -- whatever, and she sent me to another person after that, and I was seeing about 10 different people, and I had to pay for 10 different people.

And this is just to me totally asinine. People that get sick, to have to run around this city or any other city having to see a whole

bunch of specialists to take care of their health. And I wonder how serious this group is in really dealing with the problems. I have heard the question of the money and the resources. The resources are there, the money can be obtained. It's a matter of how much you are willing to fight, because if you aren't willing to fight, get out of the work and don't even talk about community organization, don't even talk about doing anything about the lead problem, except those people that come into your office, because you are not going to get anything done. And you have got to be willing to accept the consequences of that fight, because there are powers that do not like to be challenged on anything they don't see as important.

We had a big spiel here about the highway coming through the model cities area. And the toll is great once you start fighting city hall and everybody else. We lost two on a heart attack and on the special commission that was doing this, there is only two of us left in good health.

So I guess the first time I ever became aware of lead poisoning was a television

advertisement about a Spanish child and a mother involved, but it was in Spanish, and I really didn't know what they were saying. I understood it was lead and that was it. But there are so many different forms of media that are available to us, beyond personal contact. Mass media has not been held accountable to the community to do what it's supposed to do in terms of informing a community.

All we see on television today is that Sacred Heart and the murdering and all forms of violence and everything else on the TV. And then the kick-off is where we see how many holes they punched in Viet Nam. If, in fact, you want to really get community action to deal with the problem of lead poisoning, I would say that it begins the minute you leave here, because right now it's really easy, because you are all in one group, and you are supposedly at one mind set and it makes you feel very secure, but when you go back home there is only going to be one or two of you, and then you are going to have to start the uphill battle, and that is the scary part.

Now, we are all brave in big mediums. It's like gangs, because that is what makes them strong. But if you don't use mass media to inform a community, you are negligent, because they have a responsibility to the community to inform. The newspapers have a responsibility to inform a community, especially in a one-newspaper town, you do have problems sometimes with that.

Delaware is unusual to most states. We are probably sitting in the first kingdom in the union, the way it's set up. I don't care who likes it or not.

So I would say to you that there has to be, and this has been said before, it's not a secret of how you get things done or accomplished. These coalitions are fine. But a coalition is no more of a value to you unless it's based on equal power.

I heard this of the technicians joining in a coalition with community groups, and I have got burnt on those kind of coalitions, because when you try to tell a technician something about the feelings and emotions of people, they could care less,

because they are technicians, and this is the way it's done. This is the way it should be done. This is the proper method, because I went to college and I got all these degrees; therefore, I know. And the community is supposed to follow that kind of leadership. In other words, there is no real sharing back and forth, and quite frankly, it comes down to what can you do for me, and what can I do for you.

Most people that I know of in the medical profession are scared to death of politics. They will send money to an organization such as the Democrats or the Republicans. They will sneak out and vote under the cloak of night and will whisper in each other's ears about how this guy is no good. But as for going to any Senator or going to any Representatives or going to your mayor or anybody else, as a group and stating your concerns, I have never seen it happen, not here. It might be unusual someplace else, but I have never seen it happen here.

So if you are willing to get into community action and really do something, then you are going to have to get involved in politics, dirty as it

may seem. And I was one of those lofty, goaled idealists that felt that politics was too bad for me to get involved with, because it was dirty, but that is what you have got to do, because you have got to swing with the best of them, because they are swinging at you every day by not appropriating the monies, but not considering this as a major problem or all other social and economic problems and health problems, that this country is faced with.

It's quite ironic that in a nation that pouts of its power and its grandeous richness and how democratic we are and how free we are and how other societies aren't that we really live in a period of time where Hamilton has won the battle over Jefferson, that the rich class does rule, and those of below that serve that institutional structure in total and that we cannot seem to have the guts nor the determination to carry a fight through. Because I really have very low opinion of conferences. I have been in too many and I know what people do.

Procrastination is the name of the game today. Fear is the other. So that you have a

challenge, and it's been given to you, I think, since the very beginning of this conference. I can stand here and talk for days about problems and what you should do, and to tell you how to do it would apply to your situation, because everybody's not the same, you have got to fight a battle different ways every place you go.

But I am sick and tired of a bunch of hypocritical people, specifically speaking, in this country who say they live for certain ideals and certain standards and beliefs and don't do a damn thing beyond going home and collecting their money and then have the nerve to complain about why aren't we doing something about the problem.

Well, hell, you're supposed to be the people, you are supposed to tell them what to do, but it never happens. I have no sympathy for cowards. I am not talking about charging hills and getting yourself shot down or the medal of honor either.

So you can leave here and do one or two things; you can go back home and live your same lives that you lived before and say that was nice, I

got to meet a lot of nice people.

We have sat in, met a lot of nice people, where we didn't have to worry about paint falling into our mouths and get lead paint poisoning or you can go back and start working in groups and work out strategies and plans of getting action done.

And I'm going to be working here, and I will wait and see what happens. But I frankly, I don't have that much confidence. And I am not old. I may sound old. I feel like I am 80 right now, but in my short span of life people have been terribly, terribly disappointing to me, because they are not honest, basically.

So you have the challenge and it's up to you to do it. It's up to all of us. Lead poisoning is not something that is isolated and that is the unfortunate part of this conference, is that it's basically isolated. There is too many other factors that come into play around lead poisoning or any other social ill or health ill in this country. And if you start getting involved with one, you are going to have to get involved with others.

So I thank you for the pleasure of telling you off for the first time, doctors. And remember, you are the first ones to strike me, I didn't strike you first. Thank you.

DR. SEWELL: I think we have had a three-pronged challenge, three points of view about the development of the community action towards lead poisoning. Some very cogent points have been made, questions raised. It's hardly possible to listen to presentations like this without them raising some questions in your minds. And at this point I am very interested to hear from the people in the audience who have been here, some of you two days, some of you just this morning. Your reactions to Mrs. Singleton, Miss Anderson, Mr. Baker and the questions that they are asking of you.

JEFF BROWN: I am Jeff Brown from Rhode Island. I would like to make more of a comment than a question. And the comment is that in Rhode Island we have worked out a program for attacking lead poisoning without the use of any gigantic amounts of federal funds. It probably would be considered more

of a half-loaf than a whole loaf. It really consists of using available resources to get a workable program going, which is at this point not perfect, but I believe workable. And Rhode Island is one of these places that has this State Department of Health as the department of health, and so we were able to use the department of epidemiology as the administrator's organizer, and they were able to launch a screening program using the State Department of Health laboratory. And then I got involved with the lead clinic, which is set up to see that the children should pick up on the screening, and it consists of really one afternoon a week, sort of clinic in which there was no money given for the services, my services involved. And the hospital was provided room for this to work. This has worked pretty well. The State Department of Health has taken up the job of going out and checking the houses to see about the paint, and then we get into a myriad of the other organizations in terms of getting the situation fixed if there is lead in the walls and so on.

Well, all this is very nice, but the

thing about it is it's involved very few extra expenditures of funds, so we didn't have to wait for a huge appropriation from anywhere and we have been able to identify a good number of children with high lead levels and treat them. And so we haven't had anybody become seriously ill.

It was difficult to get going in terms of whenever you get something going, we got plenty of static from everywhere, because the little resources we used were in demand and also the whole concept, of course, was, came under criticism. After it was going, though, I for one think that it received a lot less slack over it than I think other people have.

And I just mention this as a fact that it's possible to get something going without a gigantic amount of extra funds. And I think that when we got all through, it's involved only a few thousand dollars of extra funds, plus the services of several technicians in terms of going out and getting the -- identifying the walls that have lead paint on them, and I think that most communities following a similar

model would be able to get a much better program going than nothing at all.

DR. SEWELL: I think it's important to hear what other communities have been able to do. Mrs. Singleton said we can't afford to wait until the funds are available, we can't afford to wait until the programs come. What can we do now? There is one question I would like to ask about the Rhode Island program. The point was made by several of the speakers that identifying children who have a risk with lead poisoning, treating those who are found to have symptoms, or elevated blood levels, does not necessarily end the problem, that the source of lead in the home is the key point, and the difficulties of funding -- the necessity is money -- is doing something about the housing.

I visited a pediatrician friend of mine in Providence, and we rode through the town and we saw Brown University, but we also saw a part of the town in which there are many Portuguese families living in old houses, most of them frame houses with thick layers of paint on them.

Now, to ask the very sticky question, what were you able to do about those old frame houses in Providence?

A VOICE: I would like to answer that question. I am a public health nurse, and I am a consultant. I am a public health nurse with the Division of Epidemiology. And I am a consultant. And we have had several different epidemics with the Portuguese families. They brought measles back into Providence -- I am Rita Rodena, consultant in epidemiology with the Rhode Island Department of Health. And we have had several different outbreaks with Portuguese families. Lead poisoning doesn't happen to be one of them, because most of the Portugueses in Rhode Island are very industrious people; they come in and move into these very poor housing areas, and I think what you are talking about is Bark's Point where we have a large community. They come in and they completely do those houses over. And they put paneling on the walls and don't use paint too much.

But we do have another area, and that

is South Providence where we have many poor, both black and white families, and that is where we found most of our lead problem.

I did a survey from 1960 to 1970 of the number of lead poisoning cases that we had reported in Rhode Island, and there were, I think, 63 in that 10-year period that were confirmed cases of lead poisoning.

In April of 1969 we started our lead poisoning surveillance in earnest and we were pushed into it. We were trying to get funds. We were trying to get a chemist to hire a chemist in the health department, but the administration couldn't see hiring another \$10,000.00 a year employee. We didn't really have to put the organizations in, the State did. And the newspapers when they found out that lead was a problem and could be a problem and that administration was holding up on a \$10,000.00 employee, it got into the newspapers and made the administration look very bad and the program got on the road with such speed that we were working 10 and 12 hours a day trying to figure out just how we were going to do this.

But we did get it going, and from April of 1969 to -- well, it was nine months, till January of 1970 we picked out 50 cases that were confirmed and were treated for lead poisoning.

I can't tell you exactly what the statistics are from '70 to '72 or '70 to '71, but these cases have been packed in and they have had continuing follow-up at Dr. Brown's clinic.

JEFF BROWN: I think the question you answered, how do you run a lead poisoning clinic when you can't be sure that every child is going back to a leadfree house, this is a good question, but I don't think it means that you live there, in the sense that I have followed a number of children who successfully moved from house to house far faster than we could get the houses straightened around, and it boiled down to watching them, and when the lead level goes up, you have to care for them again. It's hardly ideal. I don't think it's an indication to give up and say you can't do anything.

MRS. SINGLETON: Have you thought about asking the health department? I think the

health department should realize this case problem here. Have you notified to tell the people to notify the health department when they move so this house can be, you know, inspected for lead?

A VOICE: Well, the house is, when the public health nurse goes out to the home and we hired our first licensed practical nurse, was hired by the State to work in epidemiology, and I hired a negro nurse so that she could work with the families in this area, because I too think that some of the families would accept her better than they would me or some of the other nurses that might be in the, you know, might go into see them. But however, we have a large providence district nursing association and they are very well accepted.

MRS. SINGLETON: But do they know that they moved?

A VOICE: Sometimes, but we check this house out immediately when we go in. We take paint from anywhere and everywhere, even if it isn't chipping in some areas, we will take it off the porch on the outside of the house as well as on the inside

of the house. We bring it back and we have it examined and when we find lead, then we send our, or refer it to the city, to the housing commission, and they pick up the battle, and we have a law that if the landlord doesn't repair it, it isn't a very good law, it isn't a very stringent law, but we have people, in fact, in the next two or three weeks there are three of them that are going up to court.

DR. SEWELL: I think Miss Singleton is pointing out that there is a crucial point in time when the family moves out of the house when it's possible to intervene and do something about the environment.

DR. CATHBERN: Dr. Cathbern, Middletown Director of Internal and Child Services for the State, Delaware State Division of Physical Health. The title of this conference is Childhood Lead Poisoning, and we have been emphasizing for the past two days lead. There has not been much said about children. And lead is only one of their problems, and children are not a priority in this country, especially in election years, because they

don't vote very well. There are a few technical tests that keep them from doing so. One of them being age.

My point this morning is, after listening to our speakers that I feel very strongly that all of us should take back to our own organization and to our own community the idea of the whole point of this, and every other conference, is children. It's the biggest investment this country has.

Now, we have dumbed up the whole country. At least we ought to give these kids a chance to fix it, and we should not just focus on lead. We need to focus on good housing, good nutrition. Sure, you can get your blood levels down on lead, and you get them back into your office with malnutrition. I am not worried about his eating more lead, I am worried about the rest of his life. And I think this point needs to be made to a group like this. But you can get wrapped up in all the charts we saw yesterday and what we are doing in our organizations.

I couldn't agree more than I do with Mrs. Anderson that our division is underfunded and

undermanned. We know what to do. We know how to do it, but what we need is community support to say we have got the nucleus to do a job, now, doggone it, give them enough money to do it with.

But if you don't take anything else back from what I have said, please remember that what you are talking about isn't lead, you are talking about kids, and they are the most important thing we have got. Thank you.

JOHN BASKIN: John Baskin, City of Philadelphia Health Department. I would like to make an observation, if I may, please. We have had some very fine speakers for the last few days, and particularly the most part of the program has been community participation, the last three speakers. But we have shortchanged the group. We have had the opportunity of hearing experiences of other cities and we have had some excellent speakers from the City of Philadelphia. Mrs. Singleton, Dr. Sussman, and Jonathan Stein, but you have only heard half of the story. If you really want to tell it like it is, why not put the whole thing together.

MISS SMITH: Allison Smith, Nursing student, University of Delaware. I have one question, and I would like to throw up a suggestion or a comment, something which I would also be willing to do.

Yesterday I don't know how many of you filled out forms for organizing a task force. I imagine you are all from the Wilmington area or Delaware area that signed these. I don't really know where you are from, but speaking specifically about Delaware and specifically about the Wilmington area, if we want community action and we want to involve the whole community, why can't we get this task force together immediately? We don't have the funds. I am not interested in the money right now. Why can't we go out to our businessmen?

You say in the day care centers we have got paint on the walls. You don't have the money to put up plyboard. Okay, why can't interested students or interested mothers or fathers or anybody go to companies like a lumber company and get your plywood to put it up, get donations? These all can be made into tax deductions, I am sure.

If you want to involve the whole community, bring in the businessmen. I am sure we could get a lot of cooperation from them. We can also get a lot of cooperation from your University students. If we can get something like this organized, I will be very willing to help with this.

Next winter will be in January, maybe some of us can work on some over the summer. Sure, it's putting off for six months, but we can get it going for next winter.

Now, a question. Could you give us a list of paints that should be avoided, I mean, is this possible for you to do?

MRS. SINGLETON: Paints that could be avoided? All of them.

DR. SEWELL: Mrs. Singleton, will you let me amend that by saying that in the real world there are paints and paints. As with very many consumer problems, one key is to read the label. Paints currently manufactured are labeled for indoor use or for outdoor use. The criteria about the amount of lead contained in paint varies according to the

use to which the paint is to be put. And paint for outdoor purposes are allowed to have more lead than paints for indoor purposes. And this has a lot of ramifications. It means that you cannot go to the United States Navy Yard when they are handing out free paint that they use for painting battleships and is now outdated and take that home and paint the kitchen with it, because they use high contents of lead paint on battleships, not intending for children to run around battleships and scratch up paint.

A VOICE: But the reality, Dr. Sewell, is that is what happens. Outside paint is often much cheaper than inside paint and landlords aren't always very conscientious. The old bit of I supply the paint, you can paint it. Well, when I am supplying the paint and you are going to paint it, I am going to give you the cheapest paint I can get. These are realities that we face, not the fact that indoor paint, not the fact that Delaware has had a law of less than 1 per cent indoor paint since 1928 or the City of Wilmington has. That is fine. But lead paint is on those walls, and it's gotten there since 1928,

because our door paints are cheaper.

MRS. SINGLETON: I do want to say here too, you know, a lot of these landlords have paints stored in their cellars, and when you want painting he goes in the cellar and gets it. But people don't know there is lead in it. He gives it to them, just like this lady we had. The lady supplied the paint, that is where the child got the lead poisoning.

So we need to get it out of the cellar and get it out of the real estate cellars, the landlord's cellar, so they cannot give it to people, and I'm talking about this paint that they sell for \$1.98 reduced.

DR. SEWELL: I would like to ask Mrs. Anderson a question, please. When you say we just don't have a lead poisoning program, did you mean the City of Wilmington or the model cities program?

MRS. ANDERSON: Maybe some of the divisions of physical health -- I know we are working hard on it, Dr. Rose is, but I can't say we have anything that I can call effective. There are some screening programs that have been done in day care

centers and certain other places, but I don't call that a program for lead paint.

I think there are things we can do. I think licenses and inspections is getting there, but this fear, you know, there is a real fear in a community of sitting on a street, you know, if I have to get out of that house or my kid is being hurt, what is my option other than the street corner.

So you do have things like the housing authority working with relocation. There are things going on in trying to build standards in rehabilitating housing to make sure that we are not just taking off the wood trim, but we are really looking to see if there is lead in the plaster.

There are things that I have recommended through model cities, and we have something called emergency grants. Those are dollars used in the community. For instance, if the heater blows up and a family has no money to buy a heater. I think lead paint should be a priority in that kind of use. There are some concrete things we can do, but I think I would lie if I told you we had a program.

DR. SEWELL: I have been requested that you give your names for the recorder so that we can identify the person who made the remarks for the records.

There is a young lady all the way in the back in a red blouse that is very anxious to say something.

A VOICE: Yes. One of my primary -- Ruth Cramden, nursing student in Wilmington. One of my purposes in coming to this conference was to find out what Wilmington is doing about lead poisoning, what we planned to do.

Right now I am upset, I am very frustrated, because I found out that absolutely nothing is being done.

Now, I think one thing that had been stated, but perhaps has not been stressed, is that we are dealing with primarily a black problem. We are dealing with a poor problem. I question if the incidence of lead poisoning was higher in the white community, how much of a problem we would have in getting money or in applying money. I question very

strongly whether there is money available, but whether there is a priority of where money is being spent.

We hear a very impressive study of 85 youngsters being tested -- in Wilmington being tested for lead poisoning. You can walk out on any city street and find 85 kids. Wilmington is primarily a black community.

So what does 85 kids show you? You know, I get a horrifying feeling that a bunch of people are gathered together to save their own consciences, you know, to say we know the problem exists, this can be done, now, isn't it now nice that we are concerned about it. We test for cystic fibrosis, we test for PKU on every newborn baby that is born. Yet we test 85 kids for an impressive study on lead poisoning. Thank you.

DR. CRAVEN: I would like to look at least in part to try to answer your question. The medical examiner does have a machine and is willing to do the test. It happens to be Dr. Rose who is trying to set up a program. She is not here today. Maybe someone else from Dr. Rose's department --

SUSAN SHORT: Susan Short, from the City-County Health Office. The screening that Dr. Rose gave yesterday with the 85 people was done by us. However, within the last two months it hasn't been only 85, it's been close to 250, 300 children. Most of them have been in the model cities area that we have tested.

Now, we do have a screening program set up. We are trying to get money. However, our division doesn't have the allotted money. We have been working with housing authorities and licenses and inspections to get these places cleaned up. However, like everybody says, we found the problem. When it gets over 50, over 60 micrograms, which is a little late, we do have the supplies available.

We have told the communities that we have the supplies available to them, that we will take blood tests for them. We have the supplies available where we will take the paint samples for them. We will analyze them. We will let them know.

If there is a high percentage of lead paint in the house, we do follow through for one year

on the child and on the house until it's all corrected and the child is back to that normal level of micrograms he should be.

Now, we have PHN nurses going out every day in model cities doing this in their districts, getting these people to try to clear up the problem. However, we have run into difficulties because in simple fact, you know, licenses and inspection does give them 30 days to clear it up. They don't have like five or ten, but the people say, you know, the people are working. I must admit we haven't had any problem, they are working on welfare and everything. Most of the people we have are on welfare. They are working to get the work done. Maybe a little bit each welfare check, they are doing a little bit, but they are working to get it done. We do have facilities available and we have told the day care centers and well child conferences, all of them. They are all there, and any time you want it, you just have to contact us, we will come, take the sample, we will take the blood test, and people know this in the community.

MISS CRAMDEN: What do you mean, each welfare check they do a little bit? They are doing their own houses?

MISS SHORT: They are doing their own.

A VOICE: May I as representative for the Division of Health say that what Mrs. Anderson has said is true. There is no program in terms of funding. We are doing, as a division, everything that is physically possible in terms of manpower and our regular budget funding to develop a program to have one ready to go.

We were caught in a legislative accident in which these programs were funded for cities, for local government. And Rhode Island, we were left out because we have statewide health department and not autonomous county units. This is being negotiated. If those of you who were here yesterday remember what Dr. Glewau said to you -- I am beating his drums now -- that we made a proposal in our budget for the coming year beginning the first of next month for \$85,000.00 to mount this program. That was the first thing that was whacked out of our

budget. We are trying to get it back.

So in answer to you, young lady, we are doing the best we can.

MISS BONAIS: Barbara Bonais, Public Health Nurse in New Castle County Health Unit.

Two things, one about the problem is it's really a simple problem to solve. Apparently the real problem is money, and the people, like you said, have to use their checks to get something done immediately. But in order to solve the problem, we need real money, and apparently the reason we can't get money is because legislators and people who are in a position to release funds are not at the grass roots involved, just like you people are. And they don't have the emotional involvement. And just from my experience, it may sound a little ridiculous, but you have got to bring the problem to them, realistically. It's easy to talk about cases and numbers and studies, but I would like to, if it's possible, I have done it with mostly emotionally disturbed children, I have marched five kids into an office when I am talking about this disturbed kid, because it's easy to talk

about a case and if this kid is sitting there and you are looking at him and he is poisoned with lead or about to be poisoned, it's not so easy to say, I'm not going to give you money, when that kid is right there. Is it possible or is it feasible to do something like that?

MR. BAKER: I think you are right. I just point out again that most people in health, social welfare areas are not willing to lobby for what they believe in. They just don't have the stamina or gumption to do it.

MISS BONAIS: Can we, as professionals, bring the legislature to the people?

MR. BAKER: There are no professionals, and that is where we can get that out. There is no such thing as a professional. That is just trying to put a person in another box and saying that because I am a professional I have to live by certain ethics. And the way I look upon things is the way I go into a fight or something. I am at war, my object is to win, and damn all the rest of them. And I don't care if people like the way I talk to them, because if they are

afraid of the way you talk to them, you can imagine about what they are afraid of in other areas.

MISS ADAMS: Sara Adams, Public Health Nurse. Could you speak to the topic -- I thought you were going to help us, those of us who are involved with community health in what are the methods of getting community action?

MR. BAKER: Well, the problem is if this was a total Wilmington group, we could deal specifically with Wilmington and what to do. I can tell you about here in Wilmington. Number one, a task force is not going to be that effective. It's an initial start, I will not knock that, but the other thing is that you are talking about legislation and you are talking about numbers of people doing things. You cannot get people basically to do anything unless it's in the form of a crisis. And like it or not, you have to be propagandists. It has to be put in the form of a crisis to get people to move. If you want to organize people to do something, then it has to be put to them in such a manner.

Wilmington has the possibility of

setting up what I would term a social planning council that would take over a lot of the functions that are now being piecemealed all over the place, or Delaware could even do it, be given authority to designate priorities for funds in the city government in the area of social health or welfare.

No, you can work towards that. I am not saying it's going to be easy, because you have a lot of political battling to do.

The medical profession here, there are two doctors that I know of, the one was, I forgot her name, was right there, she came down to the community level in speaking to the problems in sickel cell anemia and where the community should put its best emphasis, because most people didn't know where they should put their best emphasis. Everybody was just talking about mass screening. After she discussed it with the group of people that she met with on their level and wasn't using all those technical terms, things started to move and sickel cell anemia screening started, plus the follow-ups, plus the other things were developed.

Dr. Rose came to the areas to speak about lead poisoning and explained that, and sickle cell anemia and a lot of other childhood diseases, but there is no way that you can expect a community person just to be able to understand all the ramifications and get out there and support the medical profession when the medical profession is not going to stand on its own two feet and support itself.

Now, do you expect a community organizer to come here and tell you how the medical profession can get organized?

MRS. ANDERSON: How many are here, are in private practice?

(A number of hands raised.)

MRS. ANDERSON: You are all public health types, right?

Until those who practice in the private sector recognize that they are only a subdivision of a generic thing called public health, nothing is going to happen. And until public health

types start to dialogue with the private sector, nothing is going to happen.

MR. BAKER: Well, again I am going to put it quite frankly to you. For your profession, which is supposed to be held -- you are a technical group, theoretically, and that sometimes comes into question.

Do not expect the community to come up in arms supporting you when they don't have faith in you, number one; and when you are invisible, number two. And you don't make the issue come before them. If you don't make the issue, don't expect community people to come around saying this is going to be the case and this is what we need to do.

You are supposed to be on one hand informing a community about that problem, because you are supposed to see it before anybody else sees it. So if you can't get among yourselves, all you people sitting here, you mean to tell me that you can't form your own group and get together?

Now, you are sick if you can't. You don't expect me to stand up here -- now, I will do it

after this meeting, if you want, I will meet with you in a room and get you together. But I am certainly not going to be doing the work and the responsibility that is up to the medical people.

MRS. SINGLETON: I want to say here too, Mr. Baker, it's not up to the doctors and all. It's the people themselves like we did in Philadelphia. Welfare rights got behind it and pushed it. We had a meeting with public health. We went there. We went to the former commissioners. We had meetings. And we got things done.

(Recess, from 11:00 o'clock a.m.
until 11:15 o'clock a.m.)

AFTER RECESS

DR. SEWELL: If you will take your seats, we will get on with the second half of the morning's program, which I think you will find responsive to one of the points that Jim Baker made several times in his presentation. He talked about

us, he talked about us doctors and the way in which we communicate or rather fail to communicate with people with health problems. And I am as guilty of this as anyone in connection with some of the work we are doing in the Philadelphia Schools in sickel cell anemia testing.

I was on a TV panel a month or so ago, and one of the questions asked of me was, what exactly is wrong with people who have sickel cell anemia?

Well, my answer was, the basic problem is they have an abnormal hemoglobin.

And they said, doctor, what is hemoglobin?

It never occurred to me in my orientation that I was using a word that was every day for me and perhaps unintelligable at least not of having concrete significance to the people I was trying to reach.

So we will in the next portion of the program be hearing from a couple of people who are helping us physicians and people active in the health

field in our problems of communications.

The first of these speakers will be Mr. Frank Hall, whom I have known as a shadow on a TV screen for a number of years. In fact, for five years Frank Hall was with Philadelphia's HCA newsreel reporter. He has also served as a moderator for a series of TV panel discussions with both local and worldwide topics as the meat of the TV discussion. He has a background of the theatre as well as broadcasting, and he now has an executive position with the Group W Radio and TV station. In fact, he is the director of the community relations for the Westinghouse Broadcasting Company, KYW TV in Philadelphia.

Mr. Hall is going to talk to us about the role of TV in health education with particular reference to lead poisoning. Mr. Hall.

MR. HALL: Thank you, Dr. Sewell. Mother was putting her child to bed one night, she was reading her little stories. The child was dozing off and said, Mommy, do all fairytales start with "Once Upon a Time."

And the mother smiled and said, no, dear, they don't all start with once upon a time, sometimes they start with a voice at the other end of the telephone line that says, "Hello, Mary, this is Jim, I will be working late at the office tonight."

Well, some viewers think we are in that fairyland business. All they are familiar with is the entertainment, the escape, the situation comedies, the detective stories, the shoot-em-ups, some of the drama, the variety shows and they fail to recognize that that is 80 per cent of the business and can rise as high as 85, but that from 15 to 20 per cent of the business is -- that they do not choose to watch -- deals with education. And of that 20 per cent, almost 5 per cent is devoted to health education.

And if you were to break it down simply and say if you watch 100 hours of television from sign-on to sign-off -- I am not using too technical a term there, am I, Dr. Sewell?

Five hours of the hundred is devoted to health education. That seems to be adequate, which also makes me think of the herd of cows grazing in a

pasture near a much-traveled thoroughfare. They were near the fence, near the road, and the traffic was whizzing by, and one truck went by and on it was written, "Our milk is homogenized."

And another truck went by and it said "Our milk is fortified," and another truck went by and it said, "Our milk is pasteurized."

And one cow says to the other, "Kind of makes you feel inadequate, doesn't it?"

And it kind of makes me feel inadequate when I have to say only five hours of 100, only 5 per cent, and of the 5 per cent, you only have 15 to 20 per cent that is non-entertainment.

Well, the audience, as we have discovered in utilizing various techniques in determining just what the audience is watching and listening to, we have determined that the audience prefers the escape, the relaxation, the getting away from the tension of the day and permitting himself hours of non-thinking and non-involvement. That is what hurts, non-involvement.

I am a Philadelphian. We have many

friends in New Jersey. And I often use the car to travel to New Jersey and cross that Benjamin Franklin Bridge. And I have been buying the tickets, because I save a dime every time I cross, or 15 cents, whatever it is, and I noticed that on the ticket on the bottom of every ticket it says, "Not good if detached."

Did that strike me? Not good if detached. And I preferred not to think of it in terms of some inanimate piece of ticket paper, but rather in terms of human concern, not good if detached.

And how you can make that applicable to your own existence, you're no good if you are detached. And maybe that is what the cry is when television starts to become involved and starts to editorialize, something we didn't do a number of years ago.

And we put our necks out and we are human beings and we are dictated to by our background, the aperceptive mass under which we have grown and determines the kind of individual each one is. As a result, at least we think so, this much of heredity and this much of environment, a product of

the environment.

And so we get it started with Spiro Agnew, because we take positions and we try not to in the news. We try not to in the news.

But by the very act of emphasis of what we decide to report on, that very act is subjective. If you have so much time, a half hour, and you have stories that might take three hours, and the very process of selecting what we plan to report, we are subjective. We are the products of an emotional reaction, and an emotional upbringing.

I was very much interested and very pleased as I so seldom am with what Mr. Nixon does, but very pleased with his efforts to resolve and bring into a greater understanding our foreign relations with the Communist countries. And, of course, his travels I find nothing wrong with them. I know he can't accomplish too much other than public relations -- that will still be determined by the Congress -- but even from the public relations end, the accomplishment, the achievement in his travels to China and to Russia. And I bought many, many other news reports --

they weren't handed to us, I had to buy them -- I bought a Chinese pendant which I wear when I am not dressed formally this way, with a turtle neck. I like to wear a pendant. My little boy thinks it makes me look hip to wear a pendant, but I like it too. It takes me back.

But I didn't want to wear the pendant, but I was able to get from the executive director of the Chinese YMCA, Mr. T. T. Chang -- those of you who are Philadelphians know that name very well -- who is a highly cultured individual, and who is executive director of the Chinese YMCA on North 10th Street in Philadelphia, I was able to get him to write out for me something that concerns me very much and leads me into why we are concerned with health. By we, I don't mean only the media, I mean, we, all of us, every one of us. Once we achieve some level of maturity, the number one concern in our life, number one, is our health, it comes above everything else. And some may deny it, some may say, God. Some may say, Country. Others may say, my wife; and others may say, whatever. But the number one concern

of everyone, the number one is his health, how he feels, because, do I have to tell you, without it you achieve nothing else.

And I asked him to write something for me, and he wrote a series of things, but the pendant which I wear has this figure on it. I am sorry I can't -- I am going to show you something later on on the screen, but I'm sorry I didn't bring a slide of this, but this Chinese word here is divided into two parts, and the part on your left over here, this is only one word, I put this here because I have to know whether it's this way or this way -- I know it's the upper left-hand corner -- this one word here is challenge, and if you cover up that part of the word and see this long figure that looks something like a human figure, that is enemy, and when you get the word, a combination, mandarin, Chinese of challenge an enemy, that one word is opportunity.

Some of you may want to copy this very slowly. I would love you to know this and get this figure, challenge an enemy results in opportunity.

But the Chinese want to make it perfectly clear that when they speak of an enemy, they are not speaking of some human being who wants to thrust his dagger or push you off a cliff or fire a gun in the marketplace. What they are talking about as an enemy are the natural enemies of the elements and the bacterial enemies and the disease enemies.

So that you are faced by a challenge which you can turn into an opportunity when you have that enemy, every one of you.

I noted I was talking to a young lady, I have forgotten her name, at the desk, it wasn't Dr. McKusick, because it was before she came out, and we noted how many people were smoking out there. And we talked about the fact that smoking is an enemy and what a challenge it is to face that enemy when you are a smoker.

Fortunately I am not, I never had to stop, because I simply never started. But what an enemy that must be and what a challenge you are faced with and what an opportunity it must be in the recognition that you have been able to conquer that

enemy, because that is a terrible challenge.

Now, we are faced with that same challenge, the enemy of health. We are human beings, we in broadcasting; we are not some inanimate entity, some abstract being. We are members of the community. We are interested in the health of the community. And, of course, we are interested in the economic health of the community, and apparently that seems to come first in business, because without economic health you can't do anything else. And maybe that explains why 80 per cent of the broadcast schedule, 80 to 85 per cent of broadcast schedule, deals with noneducation and nonhealth matters. That 85 per cent I have nothing to do with. There are others who have jurisdiction over that end. I am in the 15 to 20 per cent. I have the community relations title. The title is Community Relations Director. Actually I am an executive producer of education programs, and those of you who live in the cities where there are Westinghouse television stations see my name frequently at the end of health programs, education programs, never the entertainment program.

And I brought with me -- what I learned from Dr. McKusick that I would have the privilege of speaking to people interested in health programming, I called TIO, television information office, in New York, and they complied, they have a compendium of all programming done in America by the 1,000 television stations. That is a round figure, ladies and gentlemen, there aren't quite a thousand, it's nine hundred and something, but it's easy to remember.

There are a thousand television programs in the United States. There are 600 VZ and 400 U. The UHF stations as against the very high frequency stations.

And there are 6,000 again in round figures, 6,000 radio station in America, and that includes, of course, the AM, the alternating medium and the frequency modulation, the FMS. So that there are 7,000 entities, 7,000 institutions in the electronic media broadcasting.

And TIO, television information office, puts out a book every year, one for radio and one for

television, and my interest chiefly as a worker is in television, although I listen to a great deal of radio at home, especially WFLN, because of my music background. And I wanted to read just a few things -- I can't begin to take the time to read this book, which comes out every year, and this is the 1971 book -- interaction in television for public affairs programming at the community level, not the network level, I don't talk about NBC, ABC, and CBS, I am talking about the individual stations in the markets.

And I just want to read a few to you and I won't mention the station, because that isn't right, because the only station I want to really mention is KYW TV-3. And I did say, WHYY TV, didn't I, but I love WHYY TV.

"Health problems. No category lends itself more readily to local programming than health problems. This is a study coast to coast. Institutions and services exist in every community which are advancing the fight against mental and physical illness and helping to overcome the tensions and conflicts afflicting the individual amidst the

pressures of contemporary society."

And with all that I must extend
cuedoughs to the medical profession, because there
weren't the pressures a thousand years ago that we
have today. The pressures, the increase in people
along with 3 point billion people in the world, and
a prediction that by the turn of the century, which
is only 28 years from now, there will be 7 billion
people in the world. The pressures along that exist,
technologically and yet because of the medical
profession and its knowledge of health and nutritional
benefits, look at what the longevity rate is now.

I brought in -- I could have brought
in a roll of film for two hours, but I brought in
five minutes. That is all. A little five-minute
reel of the various health spots that we have on the
air.

Do I have to tell you experienced
people who know and are concerned -- and I mentioned
this to Dr. McKusick -- why does the audience know
such terms as multiple schlerosis or cystic fibrosis
or sickel cell anemia? Why do they know those terms?

Are they hearing it from the pulpit? Are they hearing it at home from their parents? Are they hearing it in the schools?

They are hearing it from the electronic media. That is how they are becoming concerned. And it isn't a dance of futility because of our constant repetition. It isn't futile that we do this.

Sure, it becomes boring sometimes all day long to see that little crippled child walking along and at the end saying, Give to the United Fund, save this little child from whatever it is that is causing that deformity, that deficiency. It's because we are doing it.

I brought in a list, I want to read some of them. I brought in a list just of our station alone, just of Channel 3, in 1972, from January, that is only six months of the list, of health spots that we have on the air, on record, by the way, on public record, open to public access. You have a right to come into a television station. The law says it's your air, it's your station. A list of public spots,

the 10's, the 20's, the 30's and the 60-second spots, that we ran on the air, things like Air Pollution Control Board, Allergy Foundation, American Dental Society, Bryn Mawr Hospital, Delaware Valley Health, Medic Alert, etc. I don't want to really bore you with the reading of this list, I thought maybe I might need it, so I made that list.

The programs described in this book all reflect one thing, each program represents a station effort to add something to the health of that community. That added something may be a format with mass appeal, a thematic unit to a series of programs, a more promotional mind spreading of programs through the station's entire schedule or just an unusual concentrated effort with care and preparation.

The public response to such effort suggests that audiences are keenly concerned and easily moved by this area of programming, and that a local station's conscientious attack on health and social problems is rewarded not only by prestige, and this is what is important to me, but by a sense of meaningful contributions to community progress.

That is the opening page, and from here on in, listing the programs with descriptions, and I have checked off just a few lines instead of reading everything.

Programs like the Changing Mind, a series of 13 broadcasts representing an original approach to programming in the area of mental illness. What is With My Time -- a 13-week series of live Sunday afternoon broadcasts, frankly patterned after the popular television quiz show, "What Is My Line?"

The series represented an attempt to use a mass appeal format in assisting a local project on aging, and on and on and on.

But what about lead poisoning? Well, this is where I blush. For some reason, and I put a search on it, because the doctor gave me -- I knew months ago that I was coming here. Did you know that I could only find two public service announcements dealing with lead poisoning? Only two, and you will see them; only two. And we have hundreds and hundreds of spots dealing with all the other ailments. And dealing with hospital urgings and drugs.

The effort in the past three years on drug education and drug warning; I have them piled up in our film room this high in public service spots. We don't have enough time in a broadcast schedule to telecast all the information that is given to us on the seriousness of the drug problem. But I only found two, that is all, on lead poisoning.

Now, I don't know whether to be embarrassed or whether to say for some reason we have not been told about this.

I have picked out a number of articles, and I don't want to -- I think I have about -- from the time that I knew I was coming here, let's say, three months, until the present, I picked out from the newspaper, from the print media about 12 articles on lead poisoning, and most of it dealt with the chips that are falling off the neglected and the rundown and shabby homes in the disadvantaged areas.

So I also saw an article that was furious from the lead paint manufacturers association and they have said that now that there is only an infinitesimal, not enough to even be concerned about,

lead production in their paint products. So at least I know this is a public relations blurb coming from the paint manufacturers.

But I also read that of the 25 leading causes of poisoning in children, less than 1 per cent is due to lead poisoning. This is what I read in the printed media.

But other than that program that you were on, and you were on WCAU, weren't you? We haven't done a program on lead poisoning. We are going to, I can assure you we are going to, because of my association now and my concern, and I have done a little reading. I had booklets; I read the entire booklet published by the Children's Hospital of Philadelphia. I sent to their public relations office and asked if they had anything, and within 48 hours I had a booklet. But I wasn't aware of it.

Now, I wasn't aware of it, because I wasn't informed by the sources that should inform me.

In conclusion, then, let's look at four or five or six spots, two of which deal with lead poisoning. These are what we call spot announcements;

you see them on the air. Not one of them is over 60 seconds in length.

Let's look at it and then maybe we will have some questions and can discuss it further.

Now, if your projectionist can hear me --

(A series of short films was then shown to the audience.)

MR. HALL: Just a sample of what we are doing in health education, five hours out of every 100 hours of broadcasting.

As a little poem that guides and determines those of us in the field of education, and may I conclude with this poem, "If nobody smiled and nobody cared and nobody helped us along, if everyone just thought of himself and everything went to the strong, if nobody thought just a little of you and nobody thought about me, and we all stood alone in the battle of life, what a lonely, sick world this would be.

Life is good for the love that we have for the things in common we share. We want to strive on not just for ourselves, but because of the people who care.

It's living and doing for somebody else on that life's purpose depends, and the joys of living when you have summed them all up, are found in the sharing with friends." Thank you.

DR. SEWELL: Thank you, Mr. Hall. One of the good things about a conference like this, and I think it does have some positive effects, is the bringing about of communications between people in the same field. And I am glad that we are going to have a representative from the academy of pediatrics public information committee on the program today.

I have been informed as a member of this committee, and I know how hard we are trying to provide people like Mr. Hall with the kind of information and the television spots and the material that you need to carry on your programs.

Mr. Paul Whitbraum, a staff member for the Academy of Pediatrics who is directly related

with the Department of Public Information, is going to give you a sample of some of the things that the Academy has been producing in the field of lead poisoning. Paul.

(Mr. Paul Whitbraum gave his talk, not transcribed by stenographer.)

DR. SEWELL: Thank you, Paul, for giving us a look at what the Academy is doing and also a chance to have a firsthand view of the film-strip.

I am not trying to decrease sale to anybody, but just for the purposes of sharing, the School District of Philadelphia has two copies of the film strip. We use them as part of the health education program in the schools. They are not always out in the field. We are not always busy with them, and if you will promise not to tell Mr. Costunza, I will be glad to lend it in Wilmington, if you will be in touch with me and we can work out a way of getting it back and forth.

Now, we had a very lively and exciting, I think, audience participation at the end of the first part of the program.

I purposely did not cut that off at the stated coffee time, but I knew that that decision was going to come back to haunt me later on in the day, and I think it's back with us now.

I am going to take the chairman's prerogative and cut out the coffee break schedule at this point and ask that we go onto the wrap-up portion of the program in which Mr. Robert Novick, who is the Director of the Bureau of Community Management Development, Director of the Bureau of Community Development Management for that organization with the beautiful name of HSMHA, Health Services, Mental Health Administration, in Rockville, Maryland. Mr. Novick is an environmentalist with experience in public health. It's been through his group that the fund to sponsor this conference came and through his bureau that all federal dollars authorized to fight lead poisoning in categorical legislation has come.

Mr. Novick has the unenviable task

of summarizing the conference and as the topic says,
and as the title says, putting it all together.
Mr. Robert Novick.

(Mr. Robert Novick gave his talk,
transcribed previously by stenographer.)

DR. SEWELL: Thank you, Mr. Novick.
It's been a pleasure for me to moderate this program.
I have learned a great deal. And I want to
particularly thank the audience for their very active
participation in the discussion. The meeting is
adjourned.

(The conference was adjourned at
12:30 o'clock p.m.)
