But we can't take this scientific track because industry has refused to give us the very information Dr. Kotin keeps referring to.

MISS YUNCKER: Asbestos is only one of the many cancer-causing perils. Could you suggest some guidelines, Dr. Wolfe, as to how standards could be set? Is there any base line of how the government could set standards that would give us a reasonable expectation of safety with all the new chemicals we are facing?

DR. WOLFE: I think one, and the first and most important way, is to start regulating some chemicals that have been known for ten, twenty or thirty years to cause cancer, not only in animals, which would be bad enough, but in humans. For example, in the work place, chromates and nickel are two known human carcinogens to which over 200,000 workers are exposed and which have not yet been regulated by the Occupational Safety and Health Administration as carcinogens.

Dr. Bingham, the current Director of OSHA, has done more in the last year than her predecessors did in the last six, to regulate carcinogens, but still these two with major human exposure go unregulated.

The second way would be to enforce the regulation over things such as asbestos or radiation, which is again one of the more well-known causes of cancer in this country. Two workers in a nuclear power plant a month or two ago were exposed to 17 and 23 rems of radiation, the largest human dose ever in a nuclear power plant, and upon asking the government, the Nuclear Regulatory Commission, whether this was an oddity or whether it occurred more often, we learned that over 13,000 workers in nuclear power or atomic power plants alone in 1976 had been exposed to a level of radiation, more than half a rem, which many scientists believe is the upper limit of what anyone should be exposed to, so enforcement of many things such as asbestos and radiation standards is not very good.

DR. KOTIN: I find myself in the uncomfortable position of having to defend accidents. I am not. Again accidents shouldn't happen, but I am unclear as to how you can predicate a regulation on the assumption that nothing, or no accident is going to occur in the work place any more than it is going to happen in the totality of our environment.

DR. WOLFE: The episode I referred to was not an accident. It was part of a plant-wide breakdown in communications, so the two workers who shouldn't have been in a given place were there because the industry did not have a coordinated plan to keep them out of there, and it was not the first, but it was one of a pattern of ten or fifteen incidents not quite as serious as that, that happened over a several year period, so it was almost programmed rather than being an accident.

MR. MAZZOCCHI: We are saying that the predictable cancer-causing substances are—and prevention—are the two instances that we want to institute. We are not talking about accidents. We know what causes cancer. We know how to contain these cancer-causing substances.

MR. BAZELL: Dr. Kennedy, I would like to go from the work place to food additives and return to the subject of saccharin, though perhaps you would like to forget it, because you took a terrible beating before Congress.

You wanted to ban saccharin and the Congress said no. There are enough people in this country who want to keep it on the market, and Congress decided just to put a label on it warning people of the danger.

With food additives, isn't that the answer? Shouldn't you just tell people there is a danger and let people make their own decisions?

DR. KENNEDY: A long time ago Congress considered that possibility and decided against it, I think wisely. Congress looked at the universe of food additives, of which there are literally thousands, looked at the complexity of processed food in America. Over fifty percent of the food Americans eat now, way over fifty percent, is processed,

and decided no reasonable person could be expected to hold that much information in a single head at one time. We can't go around the world with a road map of which food additives are hazardous and which ones aren't, so in 1958, twenty years ago, Congress decided that there ought to be a rule that if something is hazardous to your health, the folks who make food shouldn't be allowed to put it in there on purpose. That is the rule on which we proposed to ban saccharin, and that is the rule which Congress may, if the studies it has ordered during the saccharin moratorium inform it of the necessity to do so—the Congress may decide to revise that rule, but I think it has been a very sound rule.

MR. BAZELL: Dr. Kennedy, I assume from what you just said that this law, which is the Delaney Amendment—you support that law, and you think it should stand as it is?

DR. KENNEDY: The law I was referring to was not the Delaney Amendment. Saccharin would have had to be banned under the general provisions of the food safety laws quite irrespective of the so-called Delaney clause.

MR. BAZELL: Do you favor any change in the laws as they now are?

DR. KENNEDY: I think eventually we may need to contemplate some adjustments in those laws, as our analytical sensitivity improves to the point where we find ourselves banning substances, packaging materials, say, on the grounds that a very, very few molecules find their way into the food supply, but I would emphasize that I think that is a very difficult thing to do. It is a procedure that I would undertake only with the greatest reluctance and conservatism, because I think the Delaney Amendment has been a valuable consumer protection statute.

DR. SELIKOFF: There are two things about saccharin which have become an issue here now. First, if diabetics in the opinion of their treating physicians, need saccharin, fine, that could be given to them by prescription. Is that any reason for ten-year-old kids to be drinking half a dozen bottles a day of soft drinks with saccharin in them and perhaps 30 or 40 years later be at risk of developing bladder or other cancers? That is the first thing.

Secondly, all of the discussions here this afternoon have been concerned with single agents, one thing: asbestos or saccharin or diethylstilbestrol, or what-have-you. But that is not the way the environment is. That is not life. We are exposed to a whole variety of things, and many of the things that cause cancer are likely in combinations, two, three or more. They are multiple factor interactions, and we ought to control all that we can. God knows, we don't know enough, but at least what we do know we ought to control.

MR. MONROE: In the interests of time and in the hope of getting back to each of our guests at least once during the course of the rest of the program, I am going to ask the panel if they would ask each guest one question at a time, unless you are absolutely desperate to get in a second question.

MR. GREENBERG: Mr. Mazzocchi, we have heard a good deal about the failings of industry in protecting the environment and workers and the public, but organized labor, it seems to me, has not always made as strong a showing for protecting the environment as it might have. For example, recently in New Jersey, organized labor joined with industry in opposing stiffer pollution standards. What is the responsibility of organized labor to the workers and to the public at large in this regard?

MR. MAZZOCCHI: Well, we didn't say all the knaves were on industry's side. We have a few of our own, and you have uneven development of consciousness taking place, but something is being done to us, and we attempt to respond. Our responsibility is to develop an aggressive, positive posture on the causes of cancer and how to control them. That effort is being resisted in a monolithic fashion by American industry. Our right to know and our right to act is impeded. We have asked very simple questions: