

Mr. WINN. I would like to ask Dr. Grant if in his job as Director of the District of Columbia Department of Health, have you run into any individual studies that would show the percentages of air pollution damage to nose and throat, through nose and throat irritation?

Dr. GRANT. No; we have not.

As a matter of fact, it is very difficult to do these kinds of studies. I think Mr. MacKenzie previously alluded to the fact that there have been people take a look at this all over this country and, as a matter of fact, in other countries. It is a very elusive kind of problem to tackle. While there has been evidence accumulated over a number of years of the adverse effects of air pollution on human bodies, particularly when that air pollution occurs in a sudden burst as it did, for example, in New York City, London, and Donora, Pennsylvania, it has been very difficult to prove conclusively air pollution in small doses over a long period of time, although there is a very substantial body of circumstantial evidence which has accumulated to show a very closely—a very close relationship, it is well known in some cities that people who live very close to large manufacturing plants tend to have a higher mortality and morbidity rate from heart and respiratory diseases than those in other areas of the city. So this is the kind of circumstantial evidence that is available.

But to carry out the kind of definite studies which you are suggesting, certainly these are desirable but very difficult to do in order to prove conclusively a causal relationship.

Mr. WINN. Possibly you might be able to give us a little more information. I am a little surprised with as many people as there are in Washington and the District who talk about the constant air pollution to their nose and their throat and you hear about it, it is general conversation, that we don't seem to have any studies on this thing.

Dr. GRANT. The problem, Mr. Winn, and I think you can see this rather clearly, is how does one design a study, let's say, in Washington, that would prove clearly that an individual's nose problems or throat problems or cardiac problem is specifically referable to air pollution when it could be a whole host of other things. The difficulty is to design a really good study that would prove this point.

Mr. WINN. Do you think this advisable?

Dr. GRANT. I think if one could develop this kind of study it would be most advisable. But I am not sure that one can do it very easily.

Mr. WINN. Again I am no professional on this but it looks like if you are going to try to cut down, rather than just say the various types of air pollution that affect the human life and our daily lives, that you would want to find out which ones of these or which ones are prevalent here in the District and attack those first, which ones are affecting our daily lives.

Dr. GRANT. We do have some evidence on this. You are now talking about the kind of air pollutants that we have and what affect these have. We do have some evidence of this. We are studying carbon monoxide and sulfur dioxide, which are two of the real important ones, and we do know the extent to which these exist in our atmosphere through the air monitoring station that Mr. Griswold referred to.

Mr. WINN. Mr. Griswold at one time made the statement, according to the press, that the amount of dirt in the District was the fourth highest in the country and then some additional reports later on put