SKELETAL PLAN OF A COMPREHENSIVE STATISTICAL HEALTH-POLLUTION STUDY

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1. *Objective.* The objective of the proposed comprehensive statistical health-pollution (CSHP) study is to estimate the relationship between selected characteristics of health conditions and the proliferating pollutants as they appear in the actual environment.

2. *Selection of health characteristics and of the pollutants to study.* The selection of health characteristics and of pollutants to be studied falls within the field of competence of specialists in biology, in health sciences, in chemistry and in physics.

Two aspects of the problem appear to require separate consideration. First, there are suspected deleterious effects of pollutants on health of "normal" humans now living. Second, it is presumed that certain pollutants are mutagens which affect adversely future generations. The subject of study could have been simplified if these two different aspects would be treated separately. As things stand now, there is a substantial overlap: mutagenic effects seem to parallel carcinogenic effects, which manifest themselves in the now living generations. Also [1], mutagens are being suspected as causes of abnormalities at birth. These points, as well as difficulties in monitoring, will be discussed at the conference during the Thursday morning session, July 22nd.

3. *Necessity of simultaneous treatment of all the suspected deleterious pollutants with reference to a number of localities.* Even though many current studies refer to just one pollutant (frequently radiation), it must be clear that, in order to be able to evaluate the effect of a single pollutant, it is unavoidable to evaluate, perhaps only summarily, the effects of all others. The point is that all the deleterious pollutants "compete" with each other for human health and lives. The number of victims claimed by a particular pollutant A, in a given locality and during a particular year, can be small or large depending on whether another pollutant B kills many or only a few people (respectively), preventing them from succumbing to A. This remark applies to cases where the cause of death (or other condition) is unambiguously defined as, for example, death from cancer. The quantities discussed in some current pollution-health studies are what is technically called "crude rates," for example, of deaths from cancer. The proper