Monsanto

FROM: (NAME & LOCATION) F. R. Johannsen - General Offices - A2SC

DATE July 31, 1975

cc G. L. Bratsch-B3NA
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SUBJECT STATUS REPORT OF EPIDEMIOLOGICAL SURVEY

REFERENCE

TO : G. Roush-A2SA

For the past seven months a continued effort has been made to develop a statistical approach towards further defining the health experiences of those persons employed (past and present) in Department 246 - Aroclor of the Krummrich plant. The following report covers the progress we have made in that direction to date.

Photocopies of service records of each employee who has passed through the Krummrich plant personnel office from approximately 1930 (the beginning of our records) to the present have been coded and delivered to the Medical Department for review. Relevant epidemiological data have been abstracted from these service records of those persons previously and presently employed in Department 246. This review yielded the following information:

(1) According to their work histories, a total of 317 persons were identified as having worked in Department 246,

(2) Approximately 38% (120) of those on record as having worked in Department 246 were fired, resigned or were otherwise lost to followup,

(3) Approximately 45% of those workers (141) listed as employed in Department 246 actually remained in that department longer than a total of six months throughout their working years at that plant,

(4) Only 48 mortalities have been identified from that initial population of 317. Omission of those employed in Department 246 for less than six months, yielded a mortality population total of 24 persons out of a population of 137 employees having spent significant time in that section of the plant.

Because of the small number of mortalities observed in Department 246, interpretation of any relationship between cause-and-effect from a disease-specific viewpoint can only be

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interpreted by direct comparison using a statistical approach, such as a lifetable method of analysis.

Recent efforts have yielded access to a magnetic tape containing a lifetable analysis program. Further evaluations are underway to determine whether this program is accessable and applicable for use in the needed statistical study of the Department 246 population. While efforts thus far indicate that the program we now have can be of use to us in the future, any attempts to make a full interpretation of our data at this time would be only conjecture.

Before a final epidemiological study can be conducted in-house, age-specific, sex-specific and cause-specific death rates must be obtained from a comparison population (i.e., U. S., Missouri, and/or St. Louis) similarly existing during the years 1950-1974. Information needed to develop these rates has been requested from the Bureau of Vital Statistics in Jefferson City, Missouri and will be forwarded at their earliest convenience.

In summary, it should be mentioned that certain groundwork needs to be laid before any sophisticated statistical analysis of populations can be conducted in-house. Such necessary items as an adequate computer program and information concerning a typical control population (for comparison of rates) must be obtained, evaluated, "debugged" and otherwise digested before beginning such a statistical endeavor. It should be recognized that those outside concerns already proficient in the area of epidemiological analysis have passed through this stage and are capable of proceeding directly into an evaluation of our data.

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