panies in instituting a dust and radiation control program. To supplement on-the-spot consultation where dangerous hazards were encountered, an interim report, describing the progress of the study and presenting methods for correcting harmful conditions, was issued to the operators in June, 1952.

You may be interested in knowing that one of the most important procedures developed was a relatively simple method for collecting and measuring radon decay products, which present the most significant health hazard in the mines. This procedure enables the mine operators to conduct their own tests and check the effectiveness of control measures for themselves. Several of the larger operators have already obtained the necessary equipment and have been instructed in its use by Division staff members.

An area of study with great public health interest is that of air pollution. Evidences of health effects have taken the problem of air pollution out of the nuisance class and have aroused both the public and health authorities to a new realization of its potential danger. The Meuse Valley, Belgium, the Donora, Pennsylvania, and the Poza Rica, Mexico, episodes have proved conclusively that, under certain meteorological and topographical conditions, unusually heavy pollution of brief duration can cause acute attacks of illness, and death. Attention is now being focused on the chronic, or long-range, continuous exposures to small concentrations of air pollutants to determine their effects upon the health of man.

Some of these answers we hope to obtain from a study under way since 1950 in the Detroit, Michigan-Windsor, Ontario, area. This air pollution study was requested by the International Joint Commission, which considers boundary problems between the United States and its immediate neighbors. Both the Canadian and the United States Governments are participating. The American phase of the study is being conducted by the Division of Occupational Health of the Public Health Service, in cooperation with the local and State governments and other groups.

During the past year, thousands of samples of contaminants emitted from industrial, domestic, and transportation sources were collected by the mobile laboratory and at stationary sampling sites throughout the area. Various analyses were made of these samples to identify the contaminants. Considerable progress was also made in the development of stack sampling programs by industry. Plans were further developed for the biological aspects of the study, which represent the next phase.

Some of the requests that we have received for service have been of an urgent nature—industrial emergencies—as was the case when a radium capsule was ruptured in a Cincinnati plant last year, with resulting exposures of workers and contamination of the plant itself. Other problems, while perhaps not so dramatic, point to the gradual unfoldment of the occupational health program, and the need for service in relatively new areas. The field of mental health and human relations in industry is illustrative of this evolution.

In recent years, management and labor have come to realize problems of interpersonal relations often result in emotional turbances and other adjustment difficulties. Today, it is estim that emotional problems, not all of which are due to difficultie the plant, are responsible for 50 per cent of the sickness absentee in many industries.

At the last two annual meetings of the Advisory Committee the Public Health Service on Occupational Health, recommendati were made that the Service develop practicable means of study problems of human relations in industry. Following their Com tee's advice, we are now preparing a report that will show the ext of present knowledge of the problem, how it is related to hea absenteeism, turn-over, and other factors, and what steps are be taken to cope with it. This information will serve as a baseline further indicated studies and activities leading to the developmen good practices in human relations in industry.

Impelled by another need, which is daily growing more manif the Public Health Service is making greater efforts to encourage establishment of health services in industry. Our work with Health Resources Advisory Committee to the Director of Defe Mobilization, has re-affirmed our belief that such services are neces if industry is to reduce its absenteeism rate.

At present, it is estimated that sickness absenteeism in indu accounts for a loss each year of 500 million man-days, equivalent two million men out of the labor force every day. It is also kno that the establishment of in-plant health services can reduce absen ism from one-third to as much as one-half. This has staggering im cations in terms of our defense program—in the conservation and n effective use of our manpower and in the increase of our productiv

The development of in-plant health programs poses a spe problem to the small plants, in which over 70 per cent of the Nati workers are employed. Handicapped by lack of personnel and fur these plants cannot finance the full-time comprehensive health p grams found in some of the larger industries. They require guida in evaluating their needs, together with their plant and commun facilities, and in evolving practical plans of operation. We have fo that these plans may be different in each case, depending on lo variables. For example, the answer may lie in pooling the resour of neighboring plants or in collectively employing a physician a nurses to provide part-time services to the individual participat plants. In some situations, a more practical solution might be establishment of an industrial clinic with qualified specialists to se local industry. A pattern of feasible operation can be found almost every situation. Your State industrial health division, a through it, the Public Health Service, can help small plants draw suitable blueprints for in-plant health programs.

Related to the problem of establishing in-plant health service the question of the amount of nursing service needed in indust Since the industrial nurse is a pivotal figure in any industrial hea or medical program, such knowledge is essential to effective planni