I am very glad to have the opportunity to meet with you and talk with you about some of the recent developments in public health particularly involving mothers and children. Although we are living in an exciting period when medical research is providing us with the means of preventing, controlling, treating and curing diseases in increasing numbers, we find that we must still make special efforts to maintain the progress we have made.

For example although we all can take pride in our fine record of reducing infant mortality, nevertheless it is a source of concern that for the first time in 22 years infant mortality increased slightly in 1957 and again in 1958. Why has the progress in saving infant lives thus come to a halt? Are there certain groups in our population who experience greater risks in childbearing and infancy because of environmental or of cultural factors? What new specific public health measures do we need to take? I have asked the Children's Bureau to look into the problem so that we can continue to make progress in reducing needless deaths in infancy.

The recent action by the National Congress of Parents and
Teachers in urging continuous child health supervision from infancy
through the school years, in place of the summer round-up has received
widespread support. The importance of this action is illustrated
by the fact that paralytic polio has become predominantly a disease

of preschool age, especially in low income families. Although it is encouraging that about one child in three under the age of 21, or about 22,000,000 children have been immunized against polio through the State maternal and child health programs, there are still a large number of children who are not protected. Special efforts must be made by public and voluntary agencies to reach these children who live for the most part in underprivileged families.

A study recently done by the California State Department of Health of child health supervision in the State brought out that 20 per cent of the infants had no health supervision at all, or made only one visit to the doctor during the first year of life, and 36 per cent of preschool children were receiving no medical health supervision.

Only 32 per cent of the preschool children were considered adequately immunized against diphtheria, whooping cough and tetanus. If our advances in public health are to be maintained, we must give more attention to our basic preventive health services.

I am glad to be able to report that through the availability of funds from the Congress to the several agencies in the Department of Health, Education, and Welfare, there has resulted marked progress in the growth of State programs for mentally retarded children. In the space of 3 years, his State health departments have developed special clinical programs to provide diagnostic, counselling, and follow-up services. These programs are particularly concerned with the more severely retarded preschool youngsters who are living at home. Last

year such services were provided over 7,000 families. Through these programs new screening methods are being developed to find retarded children who have a condition called phenylketonuria. When diagnosed early in life and placed on special diets, retardation is prevented. Special efforts are being made, therefore, to diagnose such cases in infancy.

The Rhode Island State Department of Health is the recipient of one of these special project grants. I have observed with much satisfaction how rapidly the mental retardation program has developed in Rhode Island. The Health Department clinic's case load has grown rapidly so that it appears that it will be necessary to expand the program in the near future in order to be able to meet the many requests coming from parents. These programs are proving to be of the greatest assistance in helping parents to understand the retarded child and in giving practical advice on caring for such a child at home.

We can expect progress to be made also in the education of the retarded. The most serious obstacle to the extension and improvement of classes for mentally retarded children is the lack of qualified teachers. The Office of Education now administers grants to provide fellowships as a step toward increasing the number of educators trained specifically to work with the mentally retarded. The Fellows will prepare themselves as supervisors of State and local educational programs for mentally retarded children and as instructors for preparing teachers of the mentally retarded.

During the next few years we will be in a much better position

to understand why mental retardation, cerebral palsy, and other congenital conditions affects certain children. The National Institute of Neurological Diseases and Blindness has begun a large scale cooperative study which will cost over \$10,000,000. Sixteen medical centers will make careful, detailed studies of the pregnancies of \$40,000 women and their babies over a period of 10 years. Brown University is one of the 16 centers participating and has begun to carry out its share of the cooperative study with a grant of \$198,000 in 1959 and \$214,000 in 1960. It is expected that this study, the first of its kind, will greatly advance our knowledge of the causes and means of prevention of many congenital diseases about which we know so little today.

Progress is being made in increasing our understanding of another disease of childhood which is widespread, affecting thousands of youngsters, and yet is still pretty obscure. The Public Health Service and the Children's Bureau have begun a study of cystic fibrosis to get information about the frequency of this disease in the general population. Other studies are being done at the National Institutes of Health with a view to developing screening and diagnostic tests and research into causes, prevention, and treatment. The Rhode Island State Department of Health is one of 9 State crippled children's agencies which now are providing diagnostic and treatment services for children with cystic fibrosis.

An example of how intensive research can bring significant results for children is the recent development in the diagnosis and

surgical treatment of congenital heart disease. Probably 30,000-40,000 children are born each year with a defect of the heart. Only recently has it become possible to help these children. During the past three years the development of open heart surgery has made it possible to correct the most complicated defects, giving many of these children a normal childhood and normal life expectancy. The cost of such surgery is, of course, high and many children are being treated through the State crippled children's programs. In 1950, 2,000 children received such care; by 1958 this had increased six times to over 12,000 children. The rapid and brilliant scientific advances made in the treatment of congenital heart disease have created widespread interest in this condition with many people seeking care for their children in the several medical centers which are best equipped to care for such cases. So numerous have been the requests for care that the Congress last spring passed a special supplemental appropriation to the crippled children's grants, providing for \$1,500,000 to be used only for children's congenital heart disease. These are truly life-saving measures.

Encouraging also is the fact that changes are taking place in public attitudes toward children and adults who have epilepsy. More and more schools are accepting these children as pupils, and by the teachers' understanding of the problem of epilepsy, so do the other children in the classrooms learn that these children are basically no different from themselves. There has been much productive research in epilepsy, so that there are drugs available which control epileptic seizures in about three-fourths of the children with this disease. The State

crippled children's programs have become more responsive to getting children with seizures under medical care; in the first seven years of this decade, the number of children receiving care in the crippled children's programs increased 387 per cent.

I am glad to see that the Rhode Island State Department of Health is now including hard of hearing children in its crippled children's program. A great deal of progress has been made in case finding, especially among school children, and in diagnosis and treatment. Much permanent hearing loss can be prevented by early treatment. For children who have a permanent loss of hearing, most can be greatly helped by learning to use a hearing aid. The State Health Department in beginning its program is planning to include the purchase of hearing aids for preschool children.

We are all greatly encouraged by the progress that is being made in research in medical sciences. Yet we must remember that if these advances are to have any meaning they must be made available to all the children who can benefit from them. And the citizens of the community, and the public and voluntary agencies by joining forces and working together can make similar progress in the application of research through action programs.