An undesirable record was established in Berlin in 1947. During the year, 2,462 cases of poliomyelitis and 218 deaths were reported. From available data, the previous high record for the disease in Berlin's history was in 1941 when 474 cases and 68 deaths were reported.

The relative importance of poliomyelitis among other communicable diseases in Berlin in 1947 would place it, from a statistical standpoint, in fifth place, but as a cause of death it was of minor importance when compared to approximately 65,000 deaths from all causes in Berlin.

However, the military government viewed poliomyelitis not as to its relative importance as a cause of illness, disability, and death—though these undoubtedly were important factors—but as to the psychological factors, the primitive fears aroused in a community in which an outbreak occurs. Such psychological reactions were not limited to the German population but was evident in a large degree among the members of the occupying community.

It was difficult to reason with this kind of fear, for, although in the past two decades much has been learned about poliomyelitis, medical science has not been able to discover how to absolutely control its spread.

The outbreak in Berlin, therefore, was important to the military government because it could have caused civil unrest, it could have threatened the safety of occupational forces, and it could have interfered with the military administration of the city.

The outbreak was studied not only by military government public health officers and German public health authorities, but by scientists all over the world.

By Lt. Col. Adam J. Rapalski, MC
Chief, Public Health Branch
OMG Berlin Sector

Although there have been outbreaks on record where the incidence of the disease was higher than that recorded in Berlin, for example, in Minnesota in 1946 there were 115 cases for every 100,000 population as compared to the 76 per 100,000 in Berlin in 1947, it soon became obvious that for this part of Europe, the outbreak was one of unprecedented proportions.

This information, carried through official channels and the world press to the United States, initiated an exchange of communications between Mr. Basil O'Connor, president of the National Foundation for Infantile Paralysis in the United States and General Lucius D. Clay, the US military governor in Germany, in which the services of consultants and the offer of equipment and supplies were made and accepted.

As a result, an epidemic aid team consisting of Dr. Thomas Gucker III, orthopedic surgeon; Miss T. A. Fallon, registered nurse, and Mrs. Elizabeth Zaussner, physiotherapist, all of the Children's Hospital of Boston, arrived by air in Berlin, together with two respirators, commonly known as iron lungs, and other equipment needed for the care of patients with poliomyelitis.

It soon became obvious that an individual familiar with all of the modern concepts regarding the origin and contributing factors to the spread of poliomyelitis epidemics was needed. Dr. Albert B. Sabin, professor of research pediatrics at the University of Cincinnati College of Medicine, and the Children's Hospital Research Foundation of Cincinnati, Ohio, as well as consultant on epidemic

Three specialists from the United States examine two German girls—sisters—at the Augusta-Victoria Hospital, Berlin. The specialists are Dr. Thomas Gucker III, Mrs. Elizabeth Zaussner and Miss Anna Fallon.

(PIO, OMGUS)
diseases to the Secretary of the Army and member of the Virus and Rickettsial Committee of the Army Epidemiological Board, was rushed by air to Berlin.

The epidemic aid team had not been in Berlin for more than 45 minutes when it went to work, visiting one of the hospitals in the US Sector which had been evacuated of all other types of patients and made into a poliomyelitis center. Far into the first night the specialists supervised the installation of the two iron lungs which they had brought with them.

While the necessary mechanical and electrical adjustments were being made, in order that the equipment might operate automatically, they operated this equipment manually, at the same time suggesting to the assisting German medical personnel what could be done.

The succeeding few weeks for the epidemic aid team was a constant series of lectures, demonstrations, and conferences with German medical personnel, with US medical personnel, and public health authorities.

It might seem inconceivable to a resident of the United States that a city the size of Berlin did not have a single iron lung or some similar equipment, but such was the case, and prior to the arrival of these two iron lungs, the US Army Medical Department, through the assistance of Col. F. T. Chamberlin, commanding officer of the 279th Station Hospital in Berlin, lent its iron lung for the use of the Germans in one of the first cases in which it was obvious that this mechanical aid would be a life-saving device.

Dr. Sabin, upon his arrival, immediately began a series of conferences with the Allied public health officers and the German authorities and thereby accomplished the objectives of his visit which were: first, to acquaint the German and US physicians in Berlin with the present status of the knowledge of the epidemiology of poliomyelitis; secondly, to consult with them on any measures which might be taken to mitigate or limit the spread of the disease; and thirdly, to collect as much data which might be of value in furthering the knowledge concerning this disease, especially because of the unusual conditions which existed in Berlin.

That the German medical profession was greatly interested was evidenced during a symposium on poliomyelitis during which Doctors Sabin and Gucker presented two lectures. The symposium was scheduled to be held in the surgical lecture amphitheater of the Charite Hospital, a part of the medical school of the University of Berlin.

An hour before the symposium was scheduled, physicians and other
medical personnel filled the seats and aisles of the amphitheater and also crowded the corridors. A quick re-arrangement had to be made and the waiting crowds were told to go to the medical amphitheater, where it was arranged that Doctors Sabin and Gucker would present the same lectures immediately after they had finished the scheduled symposium. This amphitheater was also soon filled to overflowing and persons filled the corridors hoping to hear as best they could.

There is no doubt that the population of Berlin has good reason to be grateful to the National Foundation for Infantile Paralysis for sending not only the equipment, for, subsequently, four other iron lungs and other equipment were flown from the United States, but in particular for the experienced type of personnel which was sent.

The specialists' lectures aroused a great deal of interest in the German medical profession in the problems concerning poliomyelitis, so much so that the city's public health department had the lectures reprinted in pamphlet form and distributed to every practicing physician in Berlin.

There was no suggestion to the public health officers in Berlin that a poliomyelitis outbreak might occur from the number of cases that were reported during the first six months of the year. As can be seen from the chart accompanying this article, sporadic cases were scattered through a number of districts in each sector. It later appeared that the first group of cases which was the spark which started the large fire occurred during the last two weeks of July in a single small area in Friedrichshain, in the Soviet Sector.

Scientific investigation revealed that the first 18 cases all had one factor in common: they were all in children who had been playing in the same shallow concrete wading pool of Boxhagener Platz and a single case could have caused infection of them all. During the next four weeks, the majority of cases came from this and adjacent districts but at the same time scattered cases were being reported from the US, British, and French Sectors.

The peak of the epidemic was reached nine weeks after the original outbreak, during the week ended Sept. 20, when 269 cases were reported. After this there was a gradual decline and the first marked reduction occurred 16 weeks after the original outbreak. As can be seen from the chart, this reduction was not as rapid as was the onset.

Although poliomyelitis has most frequently been regarded as a disease of early childhood, and it was originally so it is no longer considered as such.

The tendency during the past 50 to 60 years has been for poliomyelitis to occur in epidemic proportions, and instead of 80 to 90 percent of the cases occurring in children under five years of age was the case two score years ago, there has been a gradual increase in the average age of persons afflicted.

It was interesting and significant therefore to follow the course of the severe outbreak in Berlin, since an analysis of more than 2,400 of these cases showed that 79 percent of the cases were in persons five years of age or older. More than 33 percent of the cases and more than 58 percent of the deaths occurred in persons (Continued on Page 19)