

THE PUBLIC HEALTH ASPECTS OF THE HURRICANE OF SAN CIPRIAN

SEPTEMBER 26-27, 1932

The first intimation of a possible hurricane was received by the Weather Bureau, San Juan, at 6 a. m. from Antigua on Monday, September 26th. At 9 a. m. the rumour was substantiated by news so unfavorable from the Islands of St. Kitts and St. Martin, that the Weather Bureau of San Juan issued official warnings all over the Island of Puerto Rico, enjoining that all possible precautions for the safeguarding of life and property be taken. From time to time intervening stations reported the progress of the hurricane, always growing in intensity, and pursuing an undeviating course towards the N. E. coast of Puerto Rico.

At 2 p. m. on Monday, Governor Beverley called an emergency meeting of ten men, who, by reason of their office as heads of various civic departments, could be responsible for direct action in the post-hurricane work of rehabilitation. They each reported their particular staff ready and organized for action. The Governor, moreover, notified the mayor of each insular township to hold similar emergency meetings with its representative citizens.

Meanwhile the staffs of various professional and mercantile institutions, as well as the private individual, were busy at work, roping, hammering and barricading—some sceptical, some panic-stricken, and some filled with a sense of stoical resignation.

About 9 p. m. the hurricane, progressing more or less steadily at a rate of 11 miles an hour, but with a circular velocity of about 120 miles per hour, struck Fajardo, and, leaving in its wake a trail of desolation, flood, devastation and death, impossible to describe, passed westward, mowing down all salient objects in its path. San Juan bore the brunt of its fury about 12.30 p. m. to 1.30 a. m., and in surveying with amazement the condition of wreckage to which such a large and important town could be reduced, we must take three contributing factors into consideration: the high, temporary type of many buildings, the aggregation of humanity

in the poorer parts of the town, and the long, unprotected coastline and the bay between which the town is stretched.

The last of these factors only applies to the solidly constructed unit of the Hospital and School of Tropical Medicine. Its front and rear face the coast and the harbour, granting full exposure to the elements; yet, so timely and thorough were the precautions taken from the first warning of the hurricane, that the damage done may be estimated at a few thousand dollars.

The Director and some members of the Hospital Staff devoted the night of September 26th to personal care of the patients and the supervision of the two buildings. Due to their presence no immoderate alarm prevailed among the patients, neither was any injury suffered among them. When the dawn broke, revealing the land and sky united in rain-swept desolation, the Hospital floors were found to be inundated by floods of water and pounds of sand and mud. A gang of workers was assembled, and in an incredibly short time, order, cleanliness and dryness were restored.

The School fared a little worse. Although the experimental animals had all been saved with the exception of a dozen or two guinea-pigs and a few chickens, their loss rendered the carefully kept data concerning them, valueless. The collapse of the electric power system caused all refrigerators to cease functioning, and thus many valuable cultures, the product of weeks of research, were lost. The principal room of the Department of Bacteriology suffered most. In spite of its elevated position in the building, a large sheet of flying zinc drove through the window, followed by a veritable whirlwind of storm which kept the zinc constantly rotating with devastating effect. Bottles of chemicals, cultures, and glass utensils flew in all directions, and were ground to fragments under the constant motion.

By ten o'clock Tuesday morning the Director had placed the Hospital at the disposal of the Government and the Red Cross, and soon all available space was filled, and over-filled, to capacity, necessitating the employment of an extra doctor and two extra nurses. The failure of the water, light, refrigeration and telephone system, constituted a severe handicap to those coping with this extra pressure of work. However, in two days the water system was restored, which enabled the Hospital laundry to be done by hand, at least; then

power appeared on the fourth or fifth day, but the tangled confusion of telephone lines could not be unravelled for weeks.

Later on in the hurricane week, serious cases were brought to the Hospital from remote rural parts, suffering from frightful wounds, complicated by infection which had set in during the delay in transporting the sufferers. Although the actual number of those who perished during the night of the 26th is only 232, yet the sum will be substantially increased when the deaths of those dying from wounds and exposure are added to it. The Hospital also extended the service of its free clinic to those less seriously injured, and this privilege was taken advantage of for the duration of weeks.

Despite the fact that three members of the Staff have experienced great personal loss, and there is probably not one member but who has been more or less financially hit, they have contributed a sizable amount toward a relief fund for the destitute.

The University of Puerto Rico, with which the School of Tropical Medicine is affiliated, is situated in the heavily stricken area of Río Piedras, three miles from San Juan. The damage done to the various buildings will be scarcely covered by \$44,000; many students by reason of personal loss have had to drop out of the scholastic running and many more will yet have to do so; the University, a Government Institution, will doubtless feel the financial stringency imposed on it by the general reduction of taxes; yet the spirit of the student body ameliorated this atmosphere of disaster, expressive as it was of a desire to help those even less fortunate, and the concerted action taken in this direction by well organized groups of students.

That part of the Army stationed in Puerto Rico, the 65th Infantry, worked in cooperation with the Governor and the Red Cross. It furnished equipment for temporary hospitals and for increasing the capacity of local hospitals; the transportation facilities it afforded were invaluable, for by these means food and bedding were distributed for the relief of thousands.

Great assistance was also given by the chief medical officer of the Naval Station and his colleagues by helping the authorities in the distribution of medical supplies, and in the treatment of emergency cases, etc.

Perhaps the greatest burden of work and increase of

responsibility was borne by the Department of Health. With the invaluable assistance of the Army, the United States Public Health Service, the Naval Station, the National Guard and the Red Cross Medical organization, the Department of Health through its health units came to the rescue of the municipalities by doubling the personnel of doctors, nurses, and sanitary inspectors; churches, schools, and tents were transformed into temporary hospitals; medical supplies were also provided; innumerable anti-toxins and inoculations were given with such good effect that death from tetanus were practically nil, and only one very minor outbreak of dysentery occurred, in comparison with the several thousand cases which developed after the Cyclone of San Felipe in 1928.

The Puerto Rico Chapter of the American Red Cross as a permanent and organized branch of the National organization was well prepared for the sudden demands thrust upon it. Only a few of its efforts and achievements can be mentioned in this limited space, but possibly the most outstanding of these was the accomplishment of the terrific task of cooperation, direction and executive administration thrust upon it. The Mother Society at Washington acted in a personal advisory capacity, and sent donations of clothing, flour, cloth and lumber. The Insular Branch has helped solve the very grave housing problem by apportioning lumber, zinc and nails to the homeless and by organizing construction squads. It has fed 51,152 families and is still feeding 26,614. It has given clothes to over 10,000 families. It will probably still be functioning in its capacity of general provider to the storm-stricken, long after this Journal is published. The Municipal, the District, the Presbyterian, and other private hospitals cannot be too highly praised for their ready and philanthropic cooperation with the Red Cross and the Department of Health.

The Medical Association also rendered signal service in its forehandedness and promptitude. The Chairman, being also in Charge of Red Cross medical work, met with his associates on the morning of Sept. 26 and made all arrangements as to what to do and how to do it. All that had been agreed upon previous to the catastrophe was carried out to the letter after it, despite losses of personal property sustained by many members, and personal injury by at least one.

The social workers of the Second Unit Schools were placed

at the disposal of the Red Cross, who gladly accepted their valuable efforts in the cause of relief work. The available number proving insufficient in this emergency, many school teachers supplemented the teams of permanent workers, and proved most efficient aides owing to their knowledge of localities and families. This united force of social workers and public school teachers investigated individual cases of distress, recommended relief, discovered new cases, assisted in establishing centers for distribution of relief, and communicated with the health authorities on problems of sickness and sanitation.

San Ciprián is the third cyclone which has visited Puerto Rico since 1928, two being of major and one of minor importance. They are becoming positively wearisome, and the assurance of immunity from cyclones for the next decade or so would do a great deal to recuperate and rehearten the inhabitants of this most beautiful island. Many fruit-ranch owners have seen the work of years reduced to mounds of rotting grapefruit and uprooted orchards. Many of the professional class are suffering from the inability of their clients to meet their obligations, and tradesmen everywhere are considering many unpaid accounts as closed.

However, every one is shouldering the day's work as it comes, sustained by the oft-repeated assurance (born of hope).

"After three cyclones in such rapid succession we cannot possibly have another for years." C. L.