

REPORT OF THE BUREAU OF PLAGUE PREVENTION DURING THE YEAR 1924-1925

The necessity of economizing during the last semester of the economic year and the construction and preparation of the new building erected for this Bureau have to some extent hindered the complete development, especially throughout the Island, of the plan of work that had been mapped out for the actual year.

RAT-PROOFING CAMPAIGN

Late in November a case of bubonic plague was discovered on board a ship that had reached New Orleans and later it was announced that infected rats had been captured in that city. Fearing that the infection would reach Porto Rico it was decided that the necessary precautions should be taken to avoid the importation of bubonic plague into this country. The United States Public Health Service took the measures that the circumstances demanded and the Department of Health concentrated its efforts on what might be called the danger zone of San Juan, giving special attention to rat-proofing activities with the cooperation of the personnel of the Bureau of General Inspection, in the commercial and maritime zones of San Juan, *i. e.*, piers, warehouses, the railroad station, etc. As a result of this survey 207 buildings were inspected, the number of deficiencies found in all these buildings being 750. Consequently it was clearly demonstrated that the condition of many of the buildings of San Juan regarding rat-proofing was deplorable. It was decided then that constant vigilance should be kept over the buildings located in the danger zone of San Juan, as wherever intense preventive measures are taken, as in Liverpool, for instance, the problem of rat-proofing is given more attention than the direct extermination of rats.

RAT-EXTERMINATION CAMPAIGN

The rat-extermination campaign was carried out this year as in the past year, and was also extended to the ports of Ponce, Mayagüez, Arecibo and some other inland localities which were infected at the time of the last epidemic such as Carolina, Río Piedras, Guaynabo and Bayamón. Ninety-two rats were separated as suspicious although not confirmed.

RAT EXTERMINATION IN SEAPORTS

This work was carried out in San Juan, Arecibo, Mayagüez, and Ponce and activities were focussed upon the danger zones in the maritime and commercial sections of each one of these cities.

THE CAMPAIGN IN SAN JUAN

As San Juan is exposed to infection this city has received more attention than any other place in Porto Rico and the campaign here has been intense and of a permanent nature. The same division of zones that was made last year has been maintained during this year, namely, San Juan proper, Puerta de Tierra to San Antonio Bridge and Santurce to Martin Peña.

From fifteen to twenty men and from two to four foremen were employed in this work daily. Until the present time the campaign has been concentrated upon the maritime zone and the warehouses on Tetuán and Marina Streets and owing to the fact that no infected rats have been captured in New Orleans since January 17 of this year we consider that the danger is over for the moment and that the personnel engaged in this intensive campaign will soon be assigned to their former stations.

A total of 69,835 rats were captured in the three zones of San Juan, classified as follows:

Decumanus.....	5,822
Alexandrinus.....	4,664
Rattus.....	2,476
Mus Musculus.....	56,848
Artomicis bobac.....	25

Some rats captured during the year were obtained by means of fumigation during the period from the 27th of June up to the 7th of July 1924. This was limited only to the warehouses in Tetuán Street, where 612 rats were killed. These rats added to the 226 captured in June make a total of 838.

ARECIBO

The campaign in Arecibo although permanent was not intense. It was only an exploration to determine if plague infection did or did not exist among rodents in that city. The total number of rats captured in this city was 7,224, classified as follows:

Decumanus.....	1,173
Alexandrinus.....	1,342
Rattus.....	299

Mus Musculus	4,409
Mongoose	1

Eight suspicious rats were examined in the laboratory but none were confirmed as positive.

MAYAGÜEZ

The same activities developed at Arecibo were instituted at Mayagüez. The rats captured are classified as follows:

Decumanus	1,598
Alexandrinus	1,362
Rattus	109
Mice	1,617
Mongoose	1

making a total of 4,687, only one of which was found to be suspicious.

PONCE

The campaign in Ponce was suspended on March 15 for lack of funds. The number of rats captured up to that time was:

Decumanus	952
Alexandrinus	316
Rattus	52
Mice	1,247
Mongoose	2
Total	2,569

RAT EXTERMINATION IN TOWNS INFECTED IN PAST EPIDEMICS

Carolina.—This town was infected in the last two epidemics. During 1923-1924 a campaign was started there which lasted 36 days only, and because of the short period of time spent it was decided to renew the campaign again on July 18, 1924. During the second campaign, which lasted 45 days, 3,886 rats were captured and classified as follows:

Decumanus	1,346
Alexandrinus	1,028
Rattus	78
Mus Musculus	1,431
Artomicis bobac	3

one of which was suspicious and none positive.

Río Piedras.—At Río Piedras where no rats had been captured since the last epidemic a campaign was started on October 1st, lasting

until the 20th of November, fifty-one days in all. The number of rodents captured was 3,595, classified as follows:

Decumanus	1, 019
Alexandrinus	821
Rattus	69
Mus Musculus	1, 685
Artomicis bobac	1

with four suspicious and none positive.

Guaynabo.—The campaign was continued in the small town of Guaynabo for 26 days, from August 18 to September 22, 1924. A total of 859 rats were captured with the following classification:

Decumanus	201
Alexandrinus	419
Rattus	34
Mice	203
Mongoose	2

No suspicious rats were captured in this town. With the cooperation of the local Health Inspector a general inspection was made so as to find out its rat-proofing conditions. Deficiencies were found in sixteen houses and the owners were notified accordingly.

Bayamón.—The campaign lasted two months from the 16th of January 1925. As a result 3,211 rats were captured and classified thus:

Decumanus	687
Alexandrinus	539
Rattus	67
Mice	1, 918

of which eight were suspicious and none positive.

EXAMINATION OF RATS

The system followed is the same as described in last year's report.

Throughout the year 3,176 cards were distributed explaining the danger involved when dead rats appear in a locality without a reasonable cause and insisting that the public notify the Department of Health as to the slightest suspicion of the presence of dead rats in dwellings and establishments. Seven hundred and fifty of these cards were distributed in San Juan, 1,009 in Santurce, 300 in Río Piedras, 1,042 in Carolina and 75 in Guaynabo. As a result of this work in San Juan and its *barrios* 304 telephone calls were received requesting rat traps. These calls were carefully attended to and

the traps were immediately sent out. Two hundred and sixty-four posters were put in different parts of the city informing the public in a clear and concise way as to the fundamental principles of plague prevention. We also bought a film entitled "The Rat Menace" for exhibition in the different moving-picture theatres of San Juan and towns of the Island. The titles of this film have been translated into Spanish. A few remarks have been added in order to make the picture more interesting and adaptable to the needs of the environment.

