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The Public Health Service on Angel Island

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ngel Island is the largest island in Alsan Francisco Bay, accessible only by ferry or boat. Most residents of

Northern California are aware of the island's natural beauty and recreational value; few, however, know about the variety of inhabitants and uses the island has accommodated in its past.

Angel Island's first known inhabitants were the Coast Miwok Indians who established villages on the island more than 2,000 years ago, living there until the early 1800s. Beginning near the end of the 18th century, the island was periodically visited by Spanish explorers, Russian sea otter

hunting expeditions, and an English sloop-of-war.

By 1850, it housed a cattle ranch, farms, and a sandstone quarry. The United States acquired title to the island following the Mexican War, and Camp Reynolds, an army garrison with artillery, was established in 1863. In 1899, the Army added Fort McDowell, that became a major debarkation point following World War I and a major overseas embarkation base from the 1920s through World War II.

Because of the isolation and security it provides, the island was used as the site of the widely publicized deportation hearings and trial of West Coast labor leader Harry Bridges from 1935 to 1939. For similar reasons,

enemy prisoners were temporarily confined on the island during both World Wars, including the captain of the Japanese midget submarine captured during the attack on Pearl Harbor in 1941.

The island also served for several decades as the home of a quarantine station, beginning in 1891, and an

then the Marine Hospital Service, and which, in 1912, became PHS. Construction of the station began in April 1890 on 10 acres of land made available by the War Department at the island's north cove. Just after the new year, the contractor turned over the completed facility to the Government at a cost of about \$98,000.

Asian immigrants arriving at Angel Island, 1931.

immigration station, beginning in 1910. Any history of the island would be incomplete without a discussion of Public Health Service (PHS) involvement in these two activities.

Establishment of the Quarantine Station

Concern about ship-borne communicable disease in the decades after the Gold Rush led the City of San Francisco to petition the War Department to provide an isolated location on one of the Bay islands for a quarantine station. In August 1888, following reports of smallpox epidemics in Hong Kong, Congress authorized the building of a quarantine station on Angel Island to be operated by what was

The station consisted of a wharf and boathouse, warehouse, disinfecting house with three steam chambers, two detention barracks, barrack and kitchen building, pump house, surgeon's house, officers' quarters, lazaretto (a "leper's house" or isolation hospital), and a convalescent building. The staff of the station was made up of nine attendants, one hospital steward, and one medical officer, with a second medical officer engaged as needed during quarantines. The station first

opened for business on April 29, 1891 under the command of Surgeon P.H. Bailhache of the Marine Hospital Service to accommodate the steamship, "China," among whose passengers were several cases of smallpox.

Under the procedures in place at the time, ships arriving at the entrance to the Bay were boarded, inspected, and fumigated by a quarantine officer appointed by the State. When contagious disease was found on board, a yellow flag was raised and the vessel was brought to anchorage at the Federal quarantine station where specialized medical care and isolation were possible.

On arrival at the station, the sick and their belongings were immediately isolated in the lazaretto, and atten-



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dants to the sick were housed in the adjoining convalescent building. Next, steerage passengers, who were almost exclusively Chinese or Japanese, were transferred with their effects to the station's detention barracks. They were held under observation for the period of quarantine, usually 14 days dating from the last outbreak, while yellow flags were flown from the lazaretto and the station's dock.

Cabin passengers and crew members, generally Caucasians, were not detained on the island for observation. This practice was rationalized on the dubious grounds that only steerage passengers were exposed to disease. After fumigation of clothing and personal effects by chlorine gas or sulfur dioxide, cabin passengers were allowed to proceed to their destination. The ship's crew was treated in a similar fashion, with the exception that crew members were not granted shore liberty until the period of incubation had passed. The vessel was fumigated with chlorine gas and cleaned before proceeding with the crew to a berth on the waterfront.

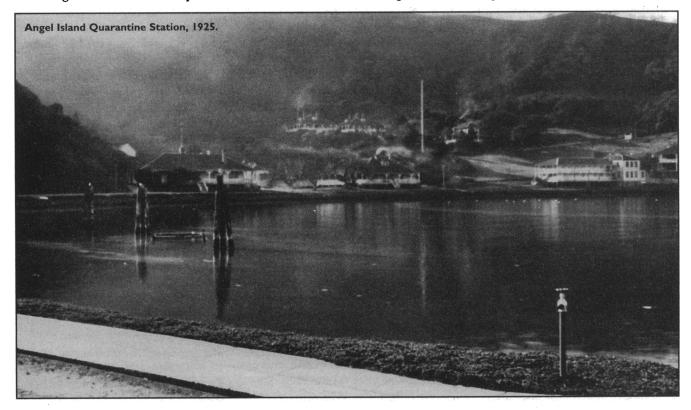
In the first 13 months of the station's operation, 2,451 persons were held under observation, with 25 cases of smallpox, and two deaths. During that period, no cases of smallpox reached San Francisco by sea.

By 1893, the Navy steamer "Omaha" was anchored in the cove and served as a detention barracks. It was later fitted out to allow fumigation of vessels brought alongside. The boarding steamer "Sternberg" was also put into operation in 1893, but several years passed before quarantine operations at San Francisco, including boarding, inspection, and fumigation of ships, were effectively consolidated under the Marine Hospital Service.

A 1915 report on station operations reveals that its workload and resources had increased significantly. A staff of 36 was on duty, the station's acreage had doubled, and more than 30 wood frame buildings and other structures were in use. During the prior fiscal year, the staff inspected 498 steamers and 113 sailing ships carrying a total of 85,660 passengers and crew members, fumigated 191 vessels, and quarantined one vessel.

Providing Immigration Assistance

In 1910, the Department of Labor and Commerce opened an immigration station at Winslow cove on Angel Island to relieve the crowded conditions at its San Francisco waterfront facility. The station was a busy one. By 1920, nearly 20,000 Japanese "picture brides" were processed at the station en route to arranged marriages. Also, the majority of the 175,000 Chinese who immigrated to the United States between 1910 and 1940 were processed there. The hardships and experiences of the Chinese immigrants are poignantly described in "Island," a collection of personal recollections and poetry assembled by Lai, Lim, and Yung in 1980.



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Under the stringent immigration laws in effect, medical examinations were required to detect the presence of physical or mental conditions that would exclude immigrants from entering the country. PHS medical officers were detailed to the immigration service to conduct these examinations.

Typically, the junior medical officer would board an incoming vessel along with the quarantine officer. Aliens who were cabin passengers were the first to be examined and were either cleared for landing or transferred to the immigration station. Steerage passengers were inspected on board, but unless immediately excluded, they went to the island for examination by the senior medical officer.

Sick passengers were housed in the station's hospital until they recovered and a determination about medical exclusion could be made. Those who passed the medical examination underwent an immigration hearing. The hearing process for the Chinese was often protracted and, with appeals, sometimes took as long as two years.

PHS medical officers examined more than 11,000 immigrants at Angel Island in 1910. The number of immigrants examined rose to 25,000 by 1920 but declined thereafter, falling below 5,000 by 1940. In the early years, the percentage of immigrants issued certificates of exclusion ranged between 10 and 15%. Trachoma, hookworm, liver flukes, and filariasis were among the medical conditions for which immigrants were excluded. After sending medical delegations to Washington, the Chinese community was eventually successful in having immigration policy modified to allow for treatment of these conditions after entry.

Other Activities

The officers and staff of the quarantine station answered many calls to duty besides those of the maritime trade and the immigration service. In 1900, the laboratory at the quarantine station, under the direction of J. J. Kinyoun, confirmed that bubonic plague had caused the death of a resident of San Francisco's Chinatown.

This diagnosis marked the beginning of an extended controversy involving PHS and local authorities in attempts to contain the disease by quarantining Chinatown and administering an experimental vaccine to its residents. The epidemic eventually caused 112 deaths, mainly Chinese, before running its course. Kinyoun ultimately was transferred to a duty station in Detroit.

Other requests took the station's personnel fairly far afield at times. In 1924, the station's surgeon was dispatched to Southern California to investigate reports of trachoma among migrant children. In 1925, after a plague-infected rat was found in the East Bay, station personnel conducted a year-long rodent eradication program in the cities of Oakland and Berkeley.

The Air Commerce Act of 1926 gave PHS the responsibility for fumigation of airplanes leaving San Francisco. Starting in 1936, station personnel regularly disinfected Pan-American Clipper ships departing for the South Pacific to guard against the introduction of malaria to Hawaii by mosquito. During World War II, station staff members were assigned to fumigate military planes at nearby Hamilton Field.

A Declining Presence

In the 1930s, PHS activities on the island decreased. The need for ship fumigation and quarantine services was significantly diminished by improved sanitation and public health practices in foreign ports, and the last civilians required to be quarantined on Angel Island were the members of a Japanese family in 1935. In 1940, the loss by fire of the immigration station's administration building provided the impetus to consolidate immigration activities in San Francisco, activities that in any case were greatly reduced by the restrictive immigration laws in place and by the advent of world war.

By 1942, although the facility on Angel Island remained open, the majority of the quarantine station's business was being conducted from offices on the San Francisco waterfront. The island's isolation, which originally made it an ideal site for a quarantine station, now represented unnecessary inconvenience and logistical expense. In August of 1946, a decision was made to deactivate the station, ending PHS presence on the island. In the same year, the Army closed its last base on the island but later returned to operate a Nike missile station from 1954 to 1963.

In December 1963, the State of California completed acquisition of the island for use as a park. Today several major buildings from the immigration station remain, but only a few of the 40 buildings of the former quarantine station have been preserved. The volunteers of the Angel Island Association and the rangers of Angel Island State Park are now the custodians of the island's history. Because of their efforts, absorbing historical exhibits provide visitors with information about the island's past that includes more than a half century of work by PHS to protect the nation's health.

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