The Impact of the Military Presence in Hawai‘i on the Health of Na Kānaka Maoli

Kalamaoka‘aina Niheu, MD*
Laurel Mei Turbin, MPH**
Seiji Yamada, MD, MPH†

Ke Ola Mamo Medical Clinic, Honolulu, Hawai‘i; **WE Act for Environmental Justice, New York, New York; Hawai‘i/Pacific Basin Area Health Education Center, University of Hawai‘i, John A. Burns School of Medicine, Honolulu, Hawai‘i. Address correspondence and reprint requests to: Ms. Laurel Mei Turbin, MPH, WE ACT for Environmental Justice, 271 West 125th Street, Suite 308, New York, New York 10027-4424; Laurel@weact.org.

Abstract
The presence of the United States military on the islands of Hawai‘i has affected the health and well-being of Native Hawaiians through large-scale historical processes, most notably Western colonization. This history has been shaped by the takeover of land for the purposes of military and commercial interests. We explore the effects that these interests have had upon the health of Native Hawaiian people, also known as Na Kānaka Maoli. Changes in policy and new program development are needed to improve the current poor health status of Native Hawaiians. In addition, potential avenues of research are proposed to evaluate the effects that the military presence has had upon the indigenous peoples of Hawai‘i.

(PHD 2007 Vol 14 No 1 pp 205-212)

The History Of the Military in Hawai‘i
The process of military takeover for the purpose of economic profit is discussed in this paper. A brief historical overview serves as a logical starting point for understanding the present resources and health outcomes for the Native Hawaiian people, also known as Na Kānaka Maoli.

Militarization, commodification of island resources and foreign land ownership characterizes the 19th century in Ka Pae ‘Aina (the indigenous term for Hawai‘i). Captain James Cook and his crew were the first Europeans to come in contact with Hawai‘i in 1778.1 While it is often said that their voyages were driven by the spirit of scientific exploration, Cook was an officer and the HMS Resolution was a military vessel in the British Royal Navy. This makes the first Hawai‘i contact a military contact.

Shortly after, Hawai‘i became an integral part of trade routes and a source of valuable resources, such as cheap reliable labor and sandalwood. In 1842, President John Tyler and the U.S. House Committee on Foreign Affairs recognized the strategic value of the islands, both in war and commerce, when they declared control of the islands as a “virtual right of conquest.”2 A small group of haole (white) businessmen, later referred to as “The Big Five,” exploited the strategic importance of Hawai‘i in their pursuit of political and economic power. By the mid to late 1800s, sugar cane was the cornerstone of Hawai‘i’s economy. The Big Five exerted political influence on the Hawaiian Monarchy to grant exclusive rights to Pearl Harbor, identified as the military “key to the central Pacific Ocean.” In exchange, the tariff on importing sugar to America was decreased. The extent of this political influence is seen clearly in the infamous “Bayonet Constitution” of 1886. National protests over the excessive influence of the Big Five resulted in then King Kalākaua’s attempt to return political power to the Monarchy. The backlash resulted in a constitution, signed at gunpoint, which ceded most of the sovereign power over to the Big Five.3 The U.S. countered challenges to its client state through military means. When King Kalākaua’s successor, Queen Liliʻuokalani, attempted to return power to the Kingdom of Hawai‘i, U.S. Minister Stevens landed U.S. Navy troops on the shores of Ka Pae ‘Aina in what was later recognized as an illegal act of war.4

The health of Na Kānaka Maoli suffered tremendously in the years following European arrival. Infectious diseases became rampant, resulting in death tolls of holocaust proportions. Wave after wave of epidemics were introduced, including tuberculosis, scabies, small pox, measles, leprosy, and typhoid fever. Venereal diseases, previously not seen in Ka Pae ‘Aina, quickly spread and killed at least 10,000 Na Kānaka Maoli over the 20 years after first contact.1 By 1890, a little over 100 years after the arrival of Captain Cook, the population of
Hawaiians had dwindled from an estimated one million people to 40,000, a 96% decline so devastating that it has been described as a population collapse. It was during this time that the Big Five seized control of Hawai‘i with the necessary aid of American naval troops, and subsequently consolidated political control over the islands. The Big Five occupied the highest political seats in the Republic of Hawai‘i, including that of President. Martial law, supported by U.S. military forces, was requested in Ka Pae ‘Āina from 1893 to 1898 to maintain control of a population opposed to their rule.1, 2, 7

The presence of the American military increased tremendously over the next century, especially following the Spanish-American War. According to scholar and activist, Kyle Kajihiro, construction of a naval base at Pearl Harbor began in 1900, destroying 36 traditional Hawaiian fishponds and transforming what was once a rich food source for O‘ahu into a vast naval station. This was soon to be followed by the construction of Fort Shafter, Fort Ruger, Fort Armstrong, Fort DeRussy, Fort Kamehameha, Fort Weaver and Schofield Barracks. General Macomb wrote “Oahu is to be encircled with a ring of steel.”8

A fundamental process that affected the mental and physical health of Na Kānaka Maoli is structural violence. Johan Galtung defined “structural violence” as the harmful influence of economic and political structures on human potential and well-being. Such violence denies communities and individuals of opportunities to reach their full physical and mental potential. In Hawai‘i, structural violence has occurred through the invasion of space, notably military take-over of land. The loss of land, the mounting political presence of the U.S. imposed by military forces, and the dwindling number of Native Hawaiians due to death from disease resulted in the loss of indigenous political autonomy. Thus, expansion of the American empire in the Pacific and Asia via military and commercial interests brought about the loss of lives, political autonomy, and nation for Na Kānaka Maoli.

The Military Presence in Hawai‘i Today
Currently, Ka Pae ‘Āina is the most densely militarized state in the nation. According to the U.S. Department of Defense, the combined military branches in 2004 include 161 military installations in Hawai‘i. Furthermore, the military controls 236,303 acres, or 5.7% of the total land area. On O‘ahu, the most densely populated island, the military controls 85,718 acres, or 22.4% of its land. On O‘ahu these lands include Pearl Harbor, Schofield Barracks, Hickam Air Force Base, Lualualei Naval Reservation, and the Kane‘ohe Marine Corps Air Station. We will show that the occupation of land for military use has resulted in the destruction of the natural environment, the release of dangerous toxins, the destruction of people’s homes, and the displacement of people.

The environmental impacts of such widespread presence are far-reaching. According to the Environmental Defense Fund, 2002 rankings of major chemical releases and waste generation, Honolulu County ranks in the top 20% of the “dirtiest/worst counties in the U.S.” for total environmental releases.11 Military installations make up five of the top 10 polluters in Hawai‘i. More than 798 military contamination sites have been identified by a report prepared for Congress, entitled the 2004 Defense and Restoration Program. Currently, there are three “Superfund” locations in Honolulu County. “Superfund” is a deceptively benign sounding term for areas that are defined by the significant dangers they impose upon the environment and the population due to abandoned or uncontrolled waste. Two out of the three sites are associated with the U.S. military, including the U.S. Pacific Command Naval Computer and Telecommunications area, and the Pearl Harbor Naval Complex.

Numerous additional examples of military negligence in the treatment of toxic substances exist. These include but are not limited to the following.
Military contamination hazards, such as unexploded ordnance, various types of fuels and petroleum products; organic solvents such as perchloroethylene and trichloroethylene; dioxins and polychlorinated biphenyls (PCB); explosives and propellants such as cyclotrimethylene-trinitramine (RDX), trinitrotoluene (TNT), octogen (HMX) and perchlorate; heavy metals such as lead and mercury; napalm, chemical weapons, and radioactive waste from nuclear powered ships, and Cobalt 60, a radioactive waste product from nuclear-powered ships, have been found in sediment at Pearl Harbor. Between 1964 and 1978, 4,843,000 gallons of low-level radioactive waste was discharged into Pearl Harbor. The complete magnitude and prevalence of environmental toxicity is unknown because the routine monitoring of toxins and any correlating effects upon health is not required. The information cited above is from areas already designated as sites for cleanup response and likely represents only the tip of the iceberg.

Nevertheless, military bases in Hawai‘i continue to expand because Hawai‘i is home to Pacific Command, the command center for U.S. military operations for half of the globe. Its outposts include bases in the Marshall Islands, Guam, Okinawa, Japan, and Korea. According to the U.S. military, bases are built for the purpose of “defense” in the event of violent struggle with other nations. However, military dominance also protects and enables commercial interests. The most direct example is the armaments industry, a business worth $200 billion worldwide.

The Health of Native Hawaiians

European contact has had a devastating effect upon Na Kānaka Maoli. Although the disease processes have changed, epidemiological data show Na Kānaka Maoli continue to experience significant health disparities. Native Hawaiians represent 22% of Hawai‘i’s population. Compared to all other ethnic groups in Hawai‘i, Na Kānaka Maoli have the highest prevalence rates for chronic diseases, such as obesity (69%) and asthma (33%), and when adjusted for age, among the highest rates of cancer, diabetes, hypertension, and heart disease. The rate of deaths due to cancer and heart disease are also highest when compared to other ethnic groups in Hawai‘i. The prevalence of high risk behaviors such as smoking, substance abuse, and violent behavior are higher than the general population and have been identified by Na Kānaka Maoli as significant problems facing the Native Hawaiian community today. Not surprisingly, Na Kānaka Maoli die at younger ages than Hawai‘i residents in other ethnic groups.

Low education level, working class job status, and low income correlates with poor health status. We argue that the military presence in Hawai‘i has played a significant role in the loss of political autonomy, access to land, and therefore healthy food sources for Na Kānaka Maoli. Furthermore, previously healthy lifestyles have been replaced by toxic activities with unknown and unstudied health ramifications. Therefore, the resultant poor health status of the indigenous people of Ka Pae ‘Aina is a form of structural violence.

Mākua Valley: A Living History

The history of Mākua Valley is a striking example of the history of Ka Pae ‘Aina and the complex relationship between the islands and the U.S. military. At the time of European contact a vital community existed, based upon ahupua‘a, the traditional pie-shaped land division extending from the mountain to the sea on the western coast of the island of O‘ahu. The infrastructure included sacred sites, rich fishing ponds, irrigation, schools for specialized training, and agriculture designed to be almost completely self-sustaining.
and forcibly removed from the valley in a cycle of dispossession and reclamation. From 1848 to the present, Mākua residents have been displaced more than six times, a figure which includes only the major land clearances.\(^{24, 26}\)

The most recent major land clearance took place on June 18, 1996. At the time, the community at Mākua was comprised of approximately 60 families and 282 people who built hale (homes) and created their own form of self-governance. The residents could be defined as homeless, because all were indigent and living in a village that existed outside of the boundaries of western land ownership. In a population comprised of the dispossessed, 83% of the population were Na Kānaka Maoli, many of whom represented generations of displaced Mākua residents.\(^{26}\)

The village exemplified the current living conditions of many of the indigenous people of Hawai‘i.

**Homeless vs. Houseless**

Though severely compromised by generations of colonization, depopulation, and westernization, Kānaka Maoli cultural values provided inspiration to survive in Mākua, where living conditions were extremely difficult. Scant rainfall, almost constant exposure to the sun, infrastructure damaging ocean winds, lack of electricity, almost no access to potable water, no real sewage system, and frequent harassment by local authorities were conditions that defined their daily life. Sparky, a former resident, described the community as consisting of Hawaiians who practiced a “traditional lifestyle,” symbolizing the resilience of the Hawaiian culture in the face of oppression and injustice.\(^{27}\) Many of the villagers resisted the term “homeless,” and instead redefined themselves as “houseless.” “We’re not homeless,” stated another resident. “We’re Hawaiians. Before the word ‘homeless’ they called us squatters. But let’s go even further back. Before that it was Hawaiian lifestyle.”\(^{28}\) In traditional times, Na Kānaka Maoli had access to pu‘uhonua, or place of refuge, in times of trouble. Due to the loss of a land base, Native Hawaiians no longer have access to places of refuge. Despite significantly adverse conditions, the people of Mākua created a sanctuary, drawing upon the traditional concept of pu‘uhonua. As one resident described, Mākua served as a safe place for “healing our past of torment and destruction.”\(^{25}\)

With no outside funding or social support from the wider population, an intertwined community of governance, agriculture, fishing, and self-protection evolved which was arguably more successful at dealing with issues of malnutrition, familial instability, hygiene, shelter, and substance abuse cessation, than many government-sanctioned programs (see Figure 4). Unfortunately, all public health efforts focused upon transferring the residents of Mākua to state and federal programs, and little data was collected on the effectiveness of their own interventions. Not only had the residents identified their own needs, but they also did the work necessary to address these own concerns. Community-initiated programs, such as those seen at Mākua, are often less expensive, have more inherent loyalty by participants, and maintain more cultural relevance. More importantly, they empower their creators to reclaim a feeling of being active participants in their own destiny. Instead of the world simply acting upon them, they had the power to act upon the world.

Contemporary clinical discourse on empowering patients and clients often fails to recognize that community members are engaged in this constructive and challenging process themselves.

The effectiveness of culturally-based interventions in the healing of Na Kānaka Maoli has been well established.\(^{29, 31}\) Of note, such interventions require a stable land base with access to an abundant supply of clean water in order to provide the means to cultivate and harvest traditional food sources. As noted above, Pearl Harbor is a striking example of how a source of healthy food in the form of traditional aquaculture has been replaced by a toxic military site.

The stated purpose of the 1996 Mākua eviction was to clear the area for public use.\(^{25}\) However, it was no coincidence that the land clearance occurred at a time when the need for military training sites became a priority.\(^{21}\) To this day, the U.S. Army continues to utilize Mākua Military Reservation and their activity has resulted in significant damage to the valley. Damage
includes but is not limited to numerous disastrous fires. The most recent example was in the summer of 2003. The fire, deliberately set by the Army, was meant to clear 900 acres of land. Due to a shift of wind, the fire raged out of control burning 2,100 acres and destroying many of the remaining sacred sites in the valley. In Makua Valley, the homes and communities have been burned repeatedly, both literally and figuratively.

In 2004, the Hawai‘i State Legislature passed Act 50, banning people from living on all beaches and public parks. The act calls for arrest, a $1,000 fine and/or 30 days in jail if the banned individual returns to the location of their citation within a year. The Act has effectively prevented the return of the Makua community, and has served as another step in the criminalization of homelessness in the islands.

Makua Valley is not an isolated incident of the ongoing separation of Na Kānaka Maoli from a land base. The transfer of land to foreign interests and unkept promises to return land continues to this day. During Hawai‘i’s Statehood Act, two million acres of land were reserved for Native Hawaiians and thousands were promised homestead awards. Today, 45 years after statehood, an estimated 30,000 have died while waiting for their land, and approximately 22,000 Hawaiians remain on the waiting list. Next, we will explore the effects that the proposed military expansion in Ka Pae ‘Aina, the Stryker Brigade, may have upon the islands.

The Stryker Brigade
The presence of the military in Ka Pae ‘Aina is part of a global dynamic. The control of extensive land masses in the Pacific as sites for military training, storage, and testing is particularly pertinent to current international politics, such as the ongoing war in Iraq and tension with North Korea. The tragedy lies not only in the historical dispossession of Ka Pae ‘Aina, but also in the fact that Hawai‘i is now part of an empire, serving as a location for soldiers drawn from working class communities all over the U.S. At the crux of a global stratagem, the militarization of Ka Pae ‘Aina is a base for further injustice and dispossession throughout the world.

The pattern continues with the July 2004 approval for a Stryker Brigade on the islands of O‘ahu and Hawai‘i. Strykers are 20-ton light armored combat vehicles designed for rapid deployment in an urban setting. A new squadron of C-17 cargo aircraft, plus 291 vehicles along with new high-speed attack ships will be stationed to provide transport for this brigade. Army plans call for further U.S. military acquisition of 1,400 acres of land on O‘ahu in addition to 23,000 acres on the island of Hawai‘i. Costs are estimated at $1.5 billion. The construction threatens to take more land and natural resources from Na Kānaka Maoli.

Environmental hazards and health risks include the release of particulate matter, volatile organic compounds and metals into the air, the contamination of groundwater resources from munitions, fuel and support facilities, the risk of range fires, and the destruction of habitat and ecosystems. Na Kānaka Maoli suffer from disproportionate rates of asthma. The significant amount of particulate matter generated will disproportionately affect those who suffer from this respiratory ailment. Environmental damage that disproportionately affects the poor and communities of color is called environmental racism.

The Stryker Brigade will also ultimately increase risk to civilians globally. Unlike most other military brigades, designed for environments such as the jungle or the desert, the Stryker Brigade was primarily designed as an urban assault vehicle. Around the world, civilians are often killed in counter-insurgency operations; these fatalities will inevitably increase when warfare is practiced in heavily populated urban centers. The examples of New Orleans after Hurricane Katrina and the announced plans for the use of the military to enforce quarantine in the event of an avian influenza pandemic are symptomatic of the increasingly domestic use of the military. Residents of the U.S. must critically address the potential for harm imposed by such military training and technology, both globally and domestically.

Recommendations
Structural violence has impacted the health of Na Kānaka Maoli through historical and political processes.
Addressing the health of Na Kānaka Maoli necessitates action on multiple levels, including policy reform, program development, and much needed research.

Policy
The United Nations Declaration on the Rights of Indigenous People states that the deprivation of Na Kānaka Maoli nationality and the theft of land represent human rights violations. In the process of self-determination, all indigenous people should rightfully and freely pursue economic, social and cultural development. Therefore, land repatriation, education, medical, and social services for Na Kānaka Maoli should be prioritized. We recommend halting further military expansion in Hawai‘i while the health effects of the military presence is investigated. The historical effects have been of such magnitude and devastation to Na Kānaka Maoli, that we also recommend the cessation of the global deployment of soldiers and arms based in Hawai‘i. The concern is to prevent globally the negative repercussions that have occurred locally.

Program Development
Effective public health programs must be culturally appropriate, relevant, community-based, and sustainable. A key strategy would be to identify community created systems that seek to redefine healthy alternatives. The residents of Mākua Beach organized themselves to form a self-governing community, and tried to establish an officially recognized pu‘uhonua (place of refuge) for houseless residents of Hawai‘i. If a community were to arise, that had self-initiated systems, which addressed their own needs, such processes should be identified and evaluated for effectiveness. If they are found to be effective, we should then lend our resources, education, and expertise to support such approaches. At the very least, we must defend such communities from destruction, and identify and discontinue policies, such as Act 50, that inhibit growth and survival.

Future Research
The health effects of the military in Hawai‘i have been inadequately researched. Initial efforts should include a detailed catalogue of all the major toxins that have historically been discharged into the air, water, and land of Ka Pae ‘Aina. Routine monitoring of common toxins produced by military activity should be required. An entity funded by the U.S. government, but comprised of researchers mutually chosen by the community, needs to be created. In addition, all known toxic sites, in particular those designated to be Superfund sites, need a comprehensive environmental study. Also an in-depth evaluation of the health status of the residents in the surrounding areas should be undertaken. Such a study would have to take into account time spent in the area, water source, habits such as fishing in contaminated waters, and age of residents, to assess degree of exposure. Ethnicity and income should be taken into account as historically, toxic exposure has been seen disproportionately among the poor and people of color.

Evaluating the effects of the military and dispossession of land on the current poor health of Na Kānaka Maoli will be a challenge. Another potential avenue of research would be to perform a genealogical survey of a population that has been removed (e.g. Māku‘a), and evaluate the rate of disease among their descendants. The rates would then have to be compared against not only that of the general population of all Native Hawaiians, but also those Na Kānaka Maoli who have had a history of a stable land base for generations. The latter would be very difficult to find, as very few populations exist in Ka Pae ‘Aina that have not been removed from their ancestral base.

Effective public health programs must be culturally appropriate, relevant, community-based, and sustainable.

Policy changes, program development, and research can be made possible by reallocating funds away from such projects as the $1.5 billion appropriated for the Stryker Brigade.

Glossary of Hawaiian Terms
ahupua‘a: traditional land division extending from the mountain to the sea
‘aina: earth/land
haole: originally, foreigner; current usage, of Caucasian ancestry
Ka Pae ‘Aina: the traditional name for Hawai‘i, used prior to Western contact. The literal translation is a group of islands or archipelago. Also seen referred to as Ka Pae‘aina O Ka Moananui, referring to Hawai‘i’s connection to all of Oceania.
Kānaka Maoli: Native Hawaiian
na: makes the noun that follows, plural
pu‘uhonua: places of refuge in traditional times, where people could go in times of trouble and find safety

References
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27. Mākua. To heal a nation. Na’alehu, HI: Na Maka o ka ‘Aina (video); 1996.


33. Act 50. Hawai’i State Legislature, SB2294 SD1 HD1 (HSCR 901-04); 2004.


13 years ago in Pacific Health Dialog, S. Siwatibau stated, “Ultimately consumption will have to be contained to reduce imports and/or exports allowed to increase. The subsistence sector which is a neglected area in our development plans, should also be allocated priority.” PHD, 1995;2(1):86.