# Hawai'i - a unique public health history

National Public Health Week 2015 celebration April 9, 2015

Affirmative Action Office
Hawai'i State Department of Health

#### Public Health Pre-Contact

The earliest
 health/public health
 providers in Hawai'i kahuna lapa'au

Ka po'e kahiko 600 CE settlement to first known other contact. British explorers arrive in 1778



### Impact of disease on Native Hawaiians

- Captain James Cook arrived in 1778 biologic threats - syphilis and gonorrhea
- Cholera 1804 (killed 15,000)
- > Flu, mumps, pertussis, measles 1826
- ➤ 1823-1853: Native Hawaiian population decreases by nearly half
- Mass depopulation of villages, plantations and urban areas

## Population Decline of Native Hawaiians

Travel to Hawai'i by Polynesians from 600 CE to first documented other contact in 1778

- 1778: Native Hawaiians estimated at 250,000 by Captain James Cook as robust and healthy
- > 1831-32: estimated at 130,313
- 1853: estimated at 71,019
- 1872: estimated at 51,531
- > 1890: estimated at 40,622

#### Missionary Arrivals: 1820-1849

- Physicians treated westerners, plantation workers and others.
- Little western medical training and little PH knowledge - cupping, bleeding, simple surgical procedures, caster oil, tooth-pulling and purges
- Contagion concepts not well understood
- Doctors' shops often sold other poisons, perfume, writing materials and other sundries

### Honolulu, early 1800's



Vue d'une rue d'Honoloulou, Capitale des Iles Sandwich.

### Hawai'i's Board of Health ("An Act relating to the Public Health")

- Oldest state DOH in U.S. Kingdom-wide by 5/16/1853 by Kamehameha III (Kauikeaouli)
- King appointed three to serve without pay to serve entire kingdom (Gerrit Judd, Thomas Rooke, William Parke)
- Impetus due to smallpox threat ships quarantined up to 42 days - also led to vaccination efforts, day of prayer on 6/14/1853
- Hospital/quarantine station established for smallpox (present-day Kapi'olani Park)



#### To the Pilot at Honolulu.

YOU are hereby directed, previous to boarding any vessel from the North West Coast of America, and other vessels generally, to ascertain whether there has been any case of SMALL POX, or other pestilent disease, on board such vessel, for the previous forty-two days. If there should have been, you are hereby forbidden to go on board such vessel, or to suffer any of your boat's crew to go on board, but to conduct such vessel to a convenient anchorage, and direct the Master to hoist a yellow flag, (with which you will be furnished by us,) at the main, and immediately give information to the constituted authorities.

Any persons neglecting these regulations, will be severely punished: and vessels not conforming to them, shall be driven from our shores.

KINAU, AUHEA PAKI.

WAIKIKI, AUGUST 1, 1836.

Kīna'u, kuhina nui of Kauikeaouli, Kamehameha III, issued the first written public health measure

Some Public Health Measures of Hawai'i-1836 to 1853

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#### Smallpox in Hawai'i

- > 1825: Vaccination attempts by Dr. Abraham Blatchley
- 1839: Dr. Thomas Rooke and others work to vaccinate 8,000 to 10,000
- Smallpox worldwide threat reaches Honolulu in 1836, 1841 and 1853
- ➤ 1853: houses became small hospitals and whole families died without care afraid to go to facilities, feared death
- 1853: A sand island off Honolulu provided by Prince Lot Kapuāiwa (later Kamehameha V) for quarantine
- ? spread by via infected clothing from San Francisco

#### Hawai'i's Leaders in Public Health

- Hawai'i DOH traces its origin to 1850 under Kamehameha III (Kauikeaouli)
- The Queen's Hospital established in 1859 by Kamehameha IV (Alexander Liholiho) & Queen Emma
- Hawai'i's 1st medical society started by Kamehameha IV and community physicians



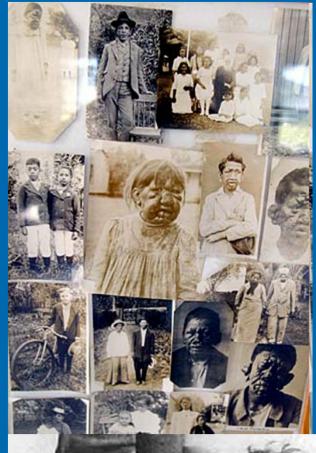
#### Repopulation Efforts for Hawai'i

- ▶ 1850: passage of "Act for the Government of Masters and Servants." 1870 Reciprocity treaty with US.
- > 1852-1887: 57,000 Chinese to work sugar plantations
- > 1877-1896:18,000 Portuguese immigrated with families
- > 1885-1924: 200,000 Japanese immigrated with families
- > 1906-1934: 113,000 Filipinos begin influx as Nationals.
- Sugar planters hired physicians to care for workers and families - developed plantation care system
- Cultural and social care factors evident in plantation care system still visible today ("cradle to grave" medicine)



#### Hansen's Disease (Leprosy) in Hawai'i

- Also called Ma'i Pake and Ma'i Ho'oka'awale 'Ohana
- First thought found here circa 1830
- Quarantine in Kalihikai west of Honolulu in 1865 and in Kaka'ako in 1881
- Leprosy Colony on Moloka'i (Kalaupapa) in 1866
- Father (Saint) Damien at Kalaupapa from 1873 -1889. Mother (Saint) Marianne who arrived at Kalihi 1883 and at Kalaupapa 1888
- Disproportionately affected Native Hawaiians and poor immigrants









#### Bubonic Plague in Hawai'i

- Diagnosed in Chinatown by Dr. Sun Chin in patient Yon Chong in 1899 (12/9/1899)
- Case confirmed with others who informed Board
- Military quarantine of Chinatown and port of Honolulu closed
- Burning of Chinatown 1900, a political and PH blunder (12/31/1899 to 1/20/1900)
- Plague blunted 1900 (3/31/1900) 61 dead
- Epidemic control led by Board of Health



#### Effects on Population Health & PH

- By 1900, rural hospitals established on or near plantations
- 1906 First PHNs employed by Palama Settlement for TB control
- 1901 to 1917: TB sanatoriums established at Le'ahi, Kula, Pu'umaile, and Kapa'a
- ➤ 1920: unions and plantations better wages, housing, health care, MCH and other welfare programs improved
- 1923: Board of Health dairy campaign to make milk safer
   baby feeding clinic established at Queen's



#### Effects on Population Health & PH

- PH nursing and health centers started in 1923, to improve MCH, especially on neighbor islands
- ➤ 1930's: systemic improvements made to plantation housing, sanitation, and health centers
- Epidemiological data gathered regularly improved diets, medications and immunizations reduced mortality and morbidity rates
- By 1956, most infants were born in hospitals and delivered by physicians



#### Some mileposts

#### PH and personal

- > 1940's-WWII. Dengue fever. Sulfones treat Hansen's Disease. HPHA founded
- > 1950's-a century of PH. Statehood.
- > 1960's-isolation for Hansen's Disease ended. Board of Health re-organized
- > 1970's-abortion liberalized. Clean Air/Clean Water. Pre-Paid Health Care Act

Recent past and present



Prior to, but especially after 9/11 and the anthrax mail threat, public health emergency preparedness and response and public's attention increased to multiple threats, hazards, and emergencies.

#### Some mileposts

#### PH and personal

- ➤ 1980's-heptachlor. VOG. AIDS. SHIP reduces uninsured to 3%. OHH
- ➤ 1990's-Iniki. Recession and cuts. NPHPSP. DOJ, Felix and Makin suits
- 2000's-bioterrorism threat. Core Competencies. TSP
- > 2010's-revised strategic plan. accreditation

What is your part in PH of the past and future?

## Public Health everyone's kuleana









+YOU

DOH AAO 04/09/15 for HPHA NPHW