

## H5N1 (Avian Influenza) i ka pipi waiu

Ma Malaki 25, 2024, ua hō'opia ka United States Department of Agriculture (USDA) i ka loa'a 'ana o nā bipi pipi ma Texas a me Kansas i ka ma'i **nā ma'i ma'i 'avian influenza (ka ma'i manu) i kapa 'ia 'o H5N1**. Mai ka hō'ike mua, ua loa'a ka H5N1 ma **nā bipi pipi ma kekahi mau moku'āina 'ē a'e**.

### Kāpae

Ua 'ike mua 'ia 'o H5N1 ma US ma **manu hihiu, manu lele i ka makahiki 2015**, a ma ka mahi'ai moa e ho'omaka ana i ka makahiki 2022. Mai ka makahiki 2022, ua 'oki 'ia nā miliona o nā manu ma muli o ka ma'i ma'i manu ma 'Amelika Hui Pū 'Ia. **O nā ma'i H5N1 i nā mammals** ua hō'ike 'ia ma waena o US, Kanada, a me nā wahi 'ē a'e o ka honua. 'O ka hapa nui o nā mammals (nā alopeke 'ula'ula, bea, skunks, raccoons, opossums, sila, nā pōpoki, nā 'iole, a me nā mea 'ē a'e) e 'ai i nā manu no ka 'ai. 'O nā ma'i hou loa ma waena o nā bipi waiu ka mea i hō'ike mua 'ia o ka H5N1 e ho'oulu ai i ka ma'i i nā pipi. 'A'ole maopopo i ke 'ano o ka loa'a mua 'ana o ka pipi waiu me ka H5N1.

'Oiai 'a'ohe hō'ike o ka laha 'ana o kēlā me kēia kanaka, a **uuku ka poe hana** ike 'ia i nā holoholona ma'i ua loa'a i ka H5N1. 'O ka po'e e hana nei i nā hana me nā pipi a me nā holoholona 'ē a'e (ka waiu, meatpacking, etc.) a me kā lākou huahana (viscera, raw milk, etc.) pono e mālama i nā ka'ina e hō'emi i ka pilikia o ka ho'olaha 'ana a me ka ma'i H5N1. **A'o 'o CDC i nā limahana i 'ike 'iai nā holoholona a i 'ole nā huahana holoholona e nānā iā lākou iho no nā hō'ailona ma'i hanu a me ka conjunctivitis ('ula'ula, maka hū) no ka li'iili'i he 10 mau lā a e 'imi i ka lā'au lapa'au mai kā lākou mea mālama ola a i 'ole ke ke'ena olakino lehulehu inā loa'a iā lākou kēia mau hō'ailona.**

### Ka ike ana o ka mea hana

'O ka po'e hana e mālama ana i nā holoholona ma'i a make paha a me nā mea 'ē a'e i haumia i ka H5N1, 'oi aku ka nui o ka pilikia o ka ma'i. 'O nā la'ana o nā hana hana 'oi aku ka nui o ka pilikia, akā 'a'ole i kaupalena 'ia i ka lawelawe 'ana a i 'ole ka ho'opili 'ana:



Kī: USDA

- Nā manu ma'i, nā holoholona, a me nā holoholona 'ē a'e
- Na kupapau o na manu, na holoholona, a me na holoholona e ae ua make mai na kumu ike ole
- Feces a 'ōpala paha
- Nā 'ili a me ka wai i haumia 'ia 'ōpala holoholona (e la'a, loko, wai wai, bākeke, pā, 'au'au) ma nā mahi'ai me nā holoholona hiki ke ma'i.
- Waiu maka
- O Viscera a me nā udders mai ka lactating pipi

Ka poe hana mahiai **nā limahana mālama holoholona**, pono e lawe i na kahu holoholona, a me na limahana hale pepehi **nā mea e pale ai i ka 'ike 'ana i ka limahana a e kaupalena i ka ma'i pilikia mai ka H5N1**. A loilo'i pilikia no nā hana ma ka mahi'ai, ka mālama holoholona a me ka mahi'ai, a me nā ke'ena hana waiu a i 'ole ka 'i'o e 'ike i nā limahana i ka pilikia o ka 'ike 'ana i ka H5N1.

### Ke kaupalena 'ana i ka 'ike 'ana o ka mea hana

'O kekahi po'e limahana i 'ike 'ia i nā pipi waiu ke hana nei i nā hana mahi'ai. Ua wehewehe 'o OSHA i ka "oihana mahi'ai" e like me kekahi hana e pili ana i ka

ulu 'ana a i 'ole ka hō'ili'ili 'ana i nā mea kanu, ka hānai 'ana i nā holoholona a i 'ole nā moa, a i 'ole nā hana e pili ana i alaka'i 'ia e ka mea mahi'ai ma nā kahua e like me nā mahi'ai, nā hale hānai, nā māla 'ai, nā mahi'ai waiu, a i 'ole nā hana mahi'ai like.

Loa'a nā kūlana palekana a me ke olakino o OSHA no ka mahi'ai ma [29 CFR Mahele 1928](#). Eia kekahī, 'o ka General Duty Clause of the Occupational Safety and Health Pono ke kānāwai (OSH Act) i nā mea hana e hā'awi i kā lākou po'e limahana "oihana a me kahi wahi hana i ka'awale 'ole mai nā pō'ino i 'ike 'ia e ho'omaka ai a i 'ole e make ai a i 'ole ka pō'ino kino kino." [29 USC 654\(a\)\(1\)](#). Loa'a nā ho'oku'u mahi'ai no nā hana li'ili'i. Eia nō na'e, pili ka OSH Act a me nā kūlana mahi'ai i nā mahi'ai me 11 a 'oi aku paha nā limahana a i 'ole i loa'a kahi kahua hana manawale'a i nā mahina he 12 i hala. Eia nō na'e, ho'okō kekahī mau papahana moku'āina i 'ae 'ia e OSHA i nā kūlana palekana a me ke olakino ma nā mahi'ai me nā limahana li'ili'i ma mua o 11, a loa'a paha i kekahī mau ho'olālā moku'āina i 'ae 'ia e OSHA.

No nā limahana i 'ike 'ia i nā pipi waiu i nā hana 'a'ole mahi'ai, e like me nā limahana hale pepehi, pili nā kūlana 'oihana ma'amau o OSHA i ka 'ike 'ana i ka 'oihana i nā ma'i avian influenza a me ka hō'ike 'ana i nā ma'i pili i ka hana:

- Lako Palena Pilikino ([29 CFR 1910. Mahele I](#)), me ka ho'okō 'ana i kahi loioli pilikino (PPE) e like me ke koi 'ia e [29 CFR 1910.132\(d\)](#)
- Hoomalu hanu ([29 CFR 1910.134](#))
- Nā kuhikuhi a ka mea hana. 'Ike no nā limahana e ho'ohana ana i nā mea hanu i ka wā 'A'ole koi 'ia ma lalo o ke kūlana ([Ho'ohana manawale'a, 29 CFR 1910.134 Pāku'i D](#))
- Mālama mo'olelo ([29 CFR 1904.7](#))

Ma nā kūlana i koi 'ole 'ia ka ho'ohana 'ana i ka respirator e ka mea hana a i 'ole ma kahi ma'amau OSHA, hiki i ka mea hana ke hā'awi a 'ae paha i nā limahana e ho'ohana i kā lākou mau respirator pono'i ke ho'oholo ka mea hana 'a'ole ia e hana i kahi pō'ino. . Mana'o 'ia kēia ho'ohana manawale'a ma lalo o ka Respiratory Protection Standard, 'ike [1910.134\(c\)\(2\)](#). Hiki i nā mea hana ke 'ae i nā limahana e ho'ohana 'olu'olu i nā N95 a me nā mea ho'oehe'e maka (FFR) kānana 'ē a'e i ka hana 'ana me nā pipi a me nā holoholona 'ē a'e.

No ka ho'ohana manawale'a 'ana i nā respirator elastomeric i nā hana mahi'ai 'ole, pono nā mea hana e hā'awi i nā limahana me kahi kope o [1910.134 Pāku'i D](#) – 'Ike no nā limahana e ho'ohana ana i nā mea ho'omaha inā 'a'ole i koi 'ia ma lalo o ka ma'amau, a hahai i nā koi e like me ka loioli olakino a me ka ho'oma'ema'e (e nānā 'o ka leka OSHA iā Kevin Cochran, 'Apelila 24, 2018).

Pono nā mea hana e ho'okō a ho'oma'ama'a i nā limahana [nā protocol CDC no ka pale 'ana mai H5N1](#) a e mālama pono i kēia mau protocols i ka wā e hana ai nā limahana i nā hana i hō'ike 'ia ma luna a i 'ole ke komo 'ana i nā hale hana 'a'ole i disinfected kahi i ma'i ai nā holoholona a i make paha:

- Holoi lima me ke kopa a me ka wai ma mua o ka waiho 'ana ma PPE.
- E ho'ohana i ka PPE i 'ōlelo 'ia, me
  - Nā lole pale wai
  - Aponoia ka NIOSH® kānana 'ana i ka mea hanu maka (FFR) (e la'a, N95® a 'oi aku paha) a i 'ole elastomeric half mask respirator me ka li'ili'i o N95® nā kānana
  - Ho'okomo pono 'ia nā maka maka maka maka maka
  - Nā kāma'a kāma'a a i 'ole nā kāma'a kāpili kāpili me nā hili i ho'opa'a 'ia
  - Ke po'o a i 'ole ka uhi lauoho
  - Nā mīkina lima hiki 'ole i ka wai
- E ho'ohana i nā wahī 'oko'a e kau ai (don) a wehe (doff) PPE.
- Don (ho'okomo i) PPE [ma ke kauoha i kauohaia](#) i ka wahī i kohō 'ia.
- Mai ho'opā i kou maka ('oi aku ka maka, ka ihu, a waha) ma hope o ka pā 'ana i nā mea haumia.
- Ho'opa'a i ka PPE [ma ke kauoha i kauohaia](#) i ka wahī i kohō 'ia.
- E ho'oma'ema'e a disinfect i nā PPE hiki ke ho'ohana hou 'ia e like me nā kuhikuhi a ka mea hana.
- E ho'olei i ka PPE ho'olei 'ia ma ke 'ano he 'ōpala biohazardous (a wahī 'ōpala i kohō 'ia).
- E 'au'au ma hope o ka wehe 'ana i nā lole i haumia.
- E komo i nā mīkina lima a me nā lole pale i ka wā e lawelawe ana/ ka holoi 'ana i nā lole i haumia a me nā mea hiki ke holoi 'ia.
- E ho'oka'awale a ho'opa'a i ka holoi holoi 'ia i loko o nā 'eke a i 'ole nā pahu mālama no ka lawe 'ana.

- Holoi i nā lole i ho'ohaumia 'ia ma ka pūnaewelege hiki (mai ho'okomo i nā mea haumia i ka hale).
- Holoi i ka lole i haumia ma kahi ki'eki'e loa hiki ke wela.

A'o, **me ka ho'ohana 'ana i ka 'ōlelo a me nā hua'ōlelo i maopopo i nā limahana**, e hō'opia i ka ho'ohana 'ana i nā hana hana e pale ai i ka ma'i, me ka mālama pono a me ka ho'ohana 'ana i nā lako pale pilikino (PPE). Pono ka ho'oma'ama'a 'ana i ka pono e holoi lima a ho'ohana i ka mea ho'oma'ema'e lima inā 'a'ole loa'a koke ka kopa a me ka wai e pale ai i ka laha 'ana o nā ma'i pathogens.

No ka 'ike hou aku e pili ana i nā kūlana OSHA pili a me ke alaka'i, e 'ike **Nā Kūlana Ho'omalu Respiratory Standard o OSHA a 'O ka 'ao'ao pūnaewelege Avian Influenza o OSHA**.

## **Pehea e ho'opili ai iā OSHA**

Ma lalo o ke kānāwai palekana a me ke ola olakino o 1970, na nā mea hana ke kuleana no ka ho'olako 'ana i nā wahi hana palekana a olakino no kā lākou po'e limahana. 'O ka hana a OSHA e hō'opia'i o i nā limahana o 'Amelika e loa'a i nā kūlana hana palekana a olakino 'ole mai ka ho'opa'i hewa 'ole. Ho'okō 'o OSHA i kāna misionari ma ka ho'onohonoho 'ana a me ka ho'okō 'ana i nā kūlana; ka ho'okō 'ana i nā 'ōlelo anti retaliation o ke kānāwai OSH a me nā kānāwai whistleblower federal; ho'olako a kāko'o i ka ho'oma'ama'a, ho'olaha, ho'ona'auao, a me ke kōkua;

a me ka hō'opia 'ana i ka maika'i o nā polokalamu OSHA moku'āina e like me ka OSHA federal, e ho'onui i kahi 'ōnaehana aupuni no ka palekana o nā limahana a me nā palekana olakino. No ka 'ike hou aku, e kipa [www.osha.gov](http://www.osha.gov) a i 'ole kelepona iā OSHA ma 1-800-321-OSHA (6742), TTY 1-877-889-5627.

## **No ka 'ike hou aku no keia kumuhanā, e nana:**

- Burrough ER, Magstadt DR, Petersen B, a me al. Kiekie pathogenic avian influenza A(H5N1) clade 2.3.4.4b virus ma'i ma'i pipi a me nā pōpoki home, United States, 2024. Emerg Infect Dis. 2024 Iulai [loa'a iā Mei 21, 2024]. <https://doi.org/10.3201/eid3007.240508>
- Oihana Mahiai (USDA) | **APHIS Mana'o Mana'o no Highly Pathogenic Avian Influenza (HPAI) H5N1 Virus i loko o nā holoholona no nā luna ola holoholona o ka moku'āina, nā mea lapa'au 'ae 'ia a me nā mea hana 'Apelila 12, 2024**
- CDC | **'O ka ma'i ma'i manu lele A(H5N1) 'O Virus i loko o nā holoholona: Nā Mana'o Kūikawā no ka Kāohi 'ana, ka nānā 'ana, a me nā noi'i olakino olakino**
- USDA | **'Ike 'ia o ka manu lele 'ino loa 'O ka ma'i ma'i ma'i ma'i nā Māmā**
- USDA | **Ka 'ike 'ana i ka ma'i ma'i Avian ki'eki'e (H5N1) ma nā 'ohana waiu: Niñau pinepine**

*'A'ole kēia māka'ika'i pō'ino he ma'amau a ho'oponopono paha, 'a'ole ia e hana i nā kuleana kānāwai hou. Loa'a iā ia nā 'ōlelo a'oa'o a me ka wehewehe 'ana i nā kūlana palekana a me ke olakino. He 'ōlelo a'oa'o nā 'ōlelo a'oa'o, 'ike ma ka 'ike, a ua mana'o 'ia e kōkua i nā mea hana i ka ho'olako 'ana i kahi wahi hana palekana a olakino. Pono ka 'Oihana Palekana a me ke Ola Ola e ho'okō i nā kūlana palekana a me ke olakino a me nā lula i ho'olaha 'ia e OSHA or e kahi moku'āina me kahi ho'olālā moku'āina i 'ae 'ia e OSHA. Eia hou, koi 'o ka Act's General Duty Clause, Section 5(a)(1), i nā mea hana e hā'awi i kā lākou po'e limahana i kahi hana me ka 'ole o nā pō'ino i 'ike 'ia e make ai a i 'ole ka pō'ino kino kino. Aia he 22 Nā Papahana Moku'āina i'āpono'ia e OSHA, e uhi ana i nā limahana kūikawā a me ka moku'āina a me ka moku'āina a me'ehiku mau Papahana Moku'āina e uhi wale ana i nā limahana aupuni a me ka moku'āina. Pono nā Papahana Moku'āina e loa'a nā kūlana a me nā papahana ho'okō i 'oi aku ka maika'i e like me ka OSHA a he 'oko'a a 'oi aku paha nā koi koi.*



Ka Hooponopono Ola a me  
ka Maluhia o ka Hana