COVID-19 SPECIAL PROJECTS

Report on the Department of Health's Contact Tracing Efforts

A Report to the Legislature of the State of Hawai'i

Report No. 20-10 August 2020







Constitutional Mandate

Pursuant to Article VII, Section 10 of the Hawai'i State Constitution, the Office of the Auditor shall conduct post-audits of the transactions, accounts, programs and performance of all departments, offices and agencies of the State and its political subdivisions.

The Auditor's position was established to help eliminate waste and inefficiency in government, provide the Legislature with a check against the powers of the executive branch, and ensure that public funds are expended according to legislative intent.

Hawai'i Revised Statutes, Chapter 23, gives the Auditor broad powers to examine all books, records, files, papers and documents, and financial affairs of every agency. The Auditor also has the authority to summon people to produce records and answer questions under oath.

Our Mission

To improve government through independent and objective analyses.

We provide independent, objective, and meaningful answers to questions about government performance. Our aim is to hold agencies accountable for their policy implementation, program management, and expenditure of public funds.

Our Work

We conduct performance audits (also called management or operations audits), which examine the efficiency and effectiveness of government programs or agencies, as well as financial audits, which attest to the fairness of financial statements of the State and its agencies.

Additionally, we perform procurement audits, sunrise analyses and sunset evaluations of proposed regulatory programs, analyses of proposals to mandate health insurance benefits, analyses of proposed special and revolving funds, analyses of existing special, revolving and trust funds, and special studies requested by the Legislature.

We report our findings and make recommendations to the governor and the Legislature to help them make informed decisions.

LLUSTRATION: ISTOCK.COM

Auditor's Comment

Transparency and Accountability – Now More Than Ever

We recognize that the Department of Health had myriad responsibilities when it did not respond to our request for information on its contact tracing efforts; however, it is precisely during times of crisis when the public needs and deserves clear, concise, and transparent communication from its government.

As Hawai'i has watched its total number of COVID-19 cases more than double since the end of July, a growing sense of urgency has intensified scrutiny of the Department of Health's (DOH) contact tracing program. Leadership of the department's contact tracing efforts has been heavily criticized by the public and government officials, including the Lieutenant Governor and a member of the Hawai'i Congressional delegation.

We intended to report on DOH's contact tracing process, primarily to filter through the varying, confusing, and often conflicting information and to provide a clearer, objective, and up-to-date understanding of the department's efforts. However, instead of cooperation and assistance, we encountered barriers, delays, and ultimately were denied access to those responsible for leading the department's contact tracing: the Disease Outbreak Control Division (DOCD) Chief and the Disease Investigation Branch (DIB) Chief, who recently took over that task. While the Health Director spoke with us, failing to respond to numerous requests until a few hours before the interview, he repeatedly directed us to speak with the DOCD Chief for answers to specific questions about the department's contact tracing process. At the end of our discussion, the Director said he would ask the DOCD Chief to talk to us and would provide us with documents we had requested in multiple letters to him, including the department's policies and procedures relating to contact tracing. However, the DOCD Chief did not contact us, and the Health Director did not provide the requested documents.

The Deputy Director for Health Resources provided us with a time when the DIB Chief was available to speak with us. In her email, the Deputy Director instructed us to include the Attorney General on future communication and that the Attorney General would participate in our meeting with the DIB Chief. However, on the day of our scheduled meeting, the DIB Chief informed us that the Deputy Director, her boss, was mistaken about her availability and said she was too busy to speak with us. The Governor's Chief of Staff subsequently contacted us to repeat that the DIB Chief was unavailable.

While we understand DOH staff are busy, especially those working to improve the department's contact tracing approach, we expected the department's full and timely cooperation. We did not expect the Attorney General or the Governor's office to involve themselves in our attempt to report about DOH's approach to contact tracing. We are not a political office. We are an office established by the State Constitution to provide objective, unbiased assessments of government operations. We can only do our job with unimpeded and complete access to an agency's program.

Now, more than ever, DOH must be transparent and accountable. The lack of cooperation we received is, frankly, inexcusable. Public confidence in the department, specifically in its ability to perform timely contact tracing of the growing number of positive cases, has been eroded. The community now has many questions about the process that DOH has, for months, represented as under control. For DOH to effectively protect public health and reduce the spread of the novel coronavirus so we can begin re-starting our economy, it is critical the department rebuild public trust. This health emergency demands DOH ensure that its response is transparent by providing the public with complete, timely, and accurate information.

We hope the department will fully and promptly cooperate with future requests.

Leslie H. Kondo State Auditor



COVID-19 SPECIAL PROJECTS

Making Contact?: Special Report on the Department of Health's **Contact Tracing Efforts**

Introduction

ontact tracing is a core disease control measure that has been employed by local and state health department personnel to combat infectious diseases for decades. To ascertain if and how the Hawai'i State Department of Health (DOH or the department) has modified its contact tracing apparatus to address the myriad challenges posed by the COVID-19 pandemic, we requested from DOH its policies, procedures, standards, and protocols that govern its approach to COVID-19 contact tracing. We also requested to speak with the relevant department staff for further confirmation and explanation of DOH's contact tracing approach. The department did not respond to our numerous document requests. We did get to speak with the DOH Director (Health Director), but he referred our questions about COVID-19 contact tracing policies, procedures and their implementation to other DOH staff who did not make themselves available to be interviewed in time for this report. As a result, our report relied on Centers for Disease Control and Prevention (CDC) interim guidance to health departments developing COVID-19 contact tracing plans. We did include observations about DOH contact tracing efforts where appropriate and to the extent that we were able to obtain the information.

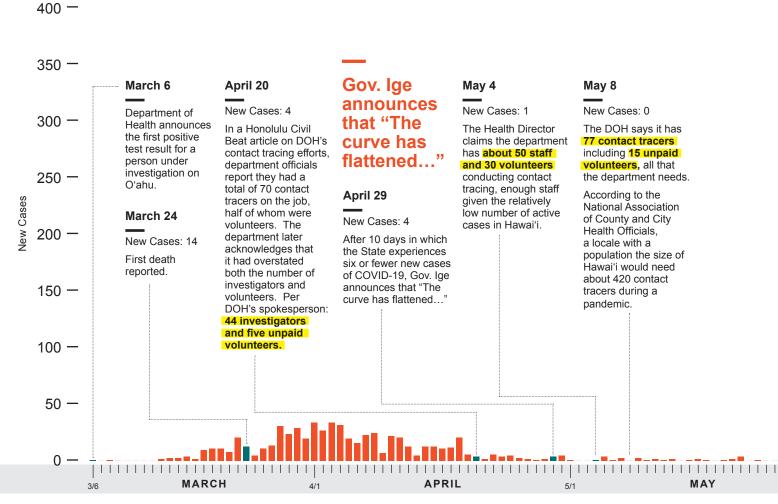
We did get to speak with the Health Director. but he referred questions about **COVID-19 contact** tracing policies, procedures and their implementation to other DOH staff who did not make themselves available to be interviewed in time for this report.

Exhibit 1

The Endless Summer

Hawaii's springtime lockdown crushed the curve but now COVID-19 is surging after a summer re-opening.

Timeline of positive COVID-19 cases and the Department of Health's response. Figures from Hawaii Data Collaborative.



Source: Office of the Auditor

According to the Health Director. nearly 1,400 people have signed up for contact tracing training at the **University of** Hawai'i.

June 10

New Cases: 4 According to the Health Director, nearly 1,400 people have signed up for contact tracing training at the University of Hawai'i. DOH currently has 60 fulltime staff who work on contact tracing and the target is to have an additional 320 health professionals trained by mid-July.

June 15

New Cases: 8

The Health Director reports that the DOH-University of Hawai'i statewide contact tracing training program is going well, with 375 scheduled to finish their training by mid-July.

JUNE

July 14

New Cases: 22

The State Epidemiologist says in addition to **256 DOH** staffers working on COVID-19 investigations, there are 51 dedicated to contact tracing. "We are able to find pretty much 99 percent of people," she says.

July 15

New Cases: 29

According to the Health Director, the department can handle the current case load of infections, including the recent spike in daily cases. However, he says that 40 or 50 new cases every day would stress his staff.

July 24

New Cases: 60

According to the State Epidemiologist, DOH is bringing on additional contact tracers to assist with case investigations and contact tracing. She says, "As we have over 400 contact tracers now trained

to augment existing staff resources, we have sufficient reserves for that purpose."

August 3

New Cases: 207

Gov. Ige assures the public that DOH has enough contact tracers trained to handle the number of cases. He points out that the National Guard has 60 contact tracers available to assist at a moment's notice and scale up the department's contact tracing capacity.

August 4

New Cases: 144

DOH says it has about 105 tracers available, far below the 420 that Lt. Gov. Green says are needed.

"I believe, as does the Governor, that we're in good shape there and we are going to be able to continue our activities as we have and follow up in a timely way with all the cases that we are hearing about," says the Health Director.

August 13

New Cases: 355

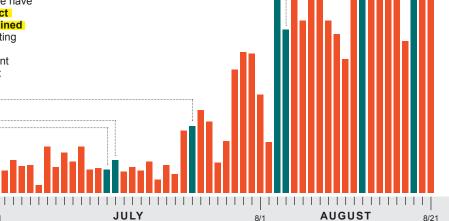
DOH announces that the new Disease Investigation Branch Chief will take over the department's contact tracing efforts. According to the department, 76 individuals are working on contact tracing and investigations, with 9 additional staff providing supervision and other support and other support.

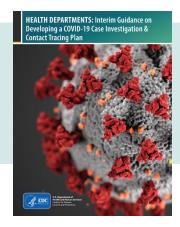
Health Director admits that the surge in COVID-19 cases is so pervasive that the department's contact tracing efforts had limited value without community cooperation.

August 19

New Cases: 261

At a news conference, the Health Director admits that the surge in COVID-19 cases is so pervasive that the department's contact tracing efforts had limited value without community cooperation. He says, "What's going to stop this disease from spreading in Hawai'i is not the number of contact tracers, it's going to be our behavior."





CDC Guidance

IN MAY 2020, the Centers for Disease Control and Prevention published Interim Guidance on Developing a COVID-19 Case Investigation & Contact Tracing Plan ("CDC's Interim Guidance"). CDC continues to update this Interim Guidance as new information about COVID-19 becomes available.

We relied primarily on CDC's Interim Guidance, as of August 2020, for the contact tracing information in this report.

What is Contact Tracing?

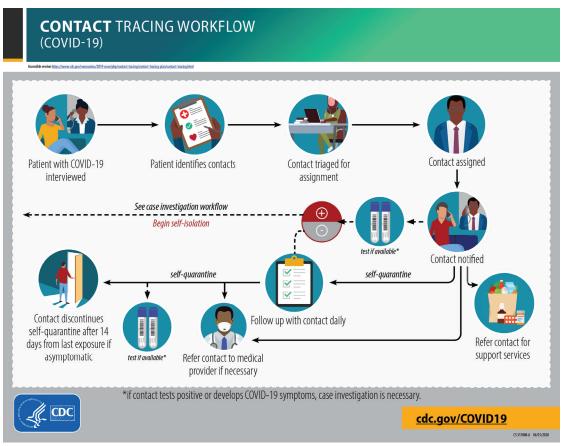
Contact tracing is a basic public health tool used throughout the world for tackling both minor and serious epidemiological incidents. In its simplest form, contact tracing is reaching out to the people who are infected, as well as contacting people they have had contact with, in an effort to isolate and suppress the disease.

Typically, COVID-19 contact tracing is initiated when a health department receives a report from a laboratory of a positive test result or a report from a healthcare provider of a patient with a confirmed or probable diagnosis of COVID-19. Case investigators interview patients with COVID-19, elicit their **contacts**, monitor for COVID-19 symptoms, and connect them to resources to support self-isolation. The contact tracing component involves notifying close contacts of the COVID-19 positive person of their potential exposure, referring them to testing resources, monitoring the contact for COVID-19 symptoms, and connecting them to resources to support **self-quarantine**.

Close Contact: Someone who was within 6 feet of an infected person for at least 15 minutes starting from 2 days before illness onset (or, for asymptomatic patients, 2 days prior to positive specimen collection) until the time the patient is isolated.

Isolation: Keeps someone who is sick or tested positive for COVID-19 without symptoms away from others, even in their own home.

Quarantine: Keeps someone who was in close contact with someone who has COVID-19 away from others.



Source: CDC

How Contact Tracing Works

As previously mentioned, DOH did not respond to our request for information on how it has modified its contact tracing apparatus to address the challenges posed by the COVID-19 pandemic. The following are various descriptions of contact tracing processes as outlined in CDC's Interim Guidance.

Comprehensive information provided by a COVID-19 patient is the foundation of a successful case investigation and contact tracing effort. CDC's "Contact Tracing Workflow" begins with a case investigator seeking to compile a list of "close contacts" from a patient with COVID-19. A case investigator will attempt to gather a COVID-19 patient's close contacts' names, their locating information, the setting of the exposure, their work setting and occupation, and any underlying health conditions or other risk factors the contacts may have (if known by the patient). With this information, contact tracers are better able to identify close contacts, notify them of their exposure to COVID-19, and provide information about the need to self-quarantine, self-monitor their symptoms, and seek medical care, if necessary.



Questions We Had for DOH

- We asked how long it takes the department to follow up with a case and close contacts after receiving notification of a positive test result. The Health Director informed us that the goal is 24 hours for cases and 48 hours for close contacts; however, we were unable to review any of the data maintained by the department relating to its contact tracing efforts, including the length of time, on average, from receiving confirmation of a positive case to when its contact tracers actually engage people who have been identified as close contacts. We question whether the department is meeting this goal.
- Although outside of the scope of our report, we did not obtain any information about whether DOH is receiving timely notification from testing laboratories about positive cases. From news reports that test results are sometimes delayed, we question the effectiveness of contact tracing under those circumstances.
- We were not able to review DOH's contact tracing protocols, the resources DOH contact tracers utilize to identify close contacts, or determine the percent of close contacts reached by contact tracers.



CDC recommends that a "close contact," defined as any individual who was within six feet of an infected person for at least 15 minutes, be notified of their exposure by phone, text, email, or in-person (if appropriate) in the primary language of the individual within 24 hours of the health department first obtaining information about a contact. However, depending on the information elicited during the case investigation, locating information for the contact may be insufficient. To keep the investigation moving forward, CDC recommends contact tracers pull information from additional resources, including, among other things, state motor vehicle records, online search engines, health department records, social media, jail/correctional facility records, and property tax records.

For areas with insufficient testing support and/or limited public health resources, CDC recommends an evaluation and monitoring hierarchy (see next page) to help guide prioritization. The hierarchy is based on the assumption that, if close contacts listed in Priority 1 become infected, they could potentially expose many people, such as those at higher risk for severe disease, or critical infrastructure workers. If close contacts in Priority 2 become infected, they may be at higher risk for severe disease, so prompt notification, monitoring, and linkage to needed medical and support services is important.

Close Contact Evaluation and Monitoring Hierarchy

EVALUATE/MONITOR CLOSE CONTACTS WHO ARE:

PRIORITY 1

- Hospitalized patients
- Healthcare personnel (HCP)
- First responders (e.g., EMS, law enforcement, firefighters)
- · Individuals living, working or visiting acute care, skilled nursing, mental health, and long-term care facilities
- · Individuals living, working or visiting community congregate settings (e.g., correctional facilities, homeless shelters, educational institutions, mass gatherings, and workplaces including production plants)
- Member of a large household living in close guarters
- · Individuals who live in households with a higher risk individual or who provide care in a household with a higher risk individual (Note: Household members who likely had extensive contact with a patient with COVID-19 should constitute the highest risk close contacts.)

PRIORITY 2

- Critical infrastructure workers*
- Individuals 65 years of age and older
- · Individuals at higher risk for severe disease
- Pregnant women

PRIORITY 3

· Individuals with symptoms who do not meet any of the above categories

PRIORITY 4

 Individuals without symptoms who do not meet any of the above categories

Source: CDC

^{*}Consider moving to Priority 1 any critical infrastructure worker who works closely with other critical infrastructure workers and/or is in close contact with large numbers of people (e.g., transportation, food service).



Questions We Had for DOH

- If a contact needs to be interviewed via an interpreter, does the department have access to those services? What languages? What is the process to determine the need for, to request, and to obtain interpreter assistance?
- What steps will be taken if a close contact is unwilling or unable to be interviewed or cannot be located?
- How does someone know that the department's contact tracer is legitimate and not a scam? How does DOH encourage close contacts to answer and respond to the contact tracer's call, text, or email?



A successful notification of exposure allows for an exchange of information with the person (contact) exposed to COVID-19 and offers an opportunity to answer questions and provide referrals for testing, medical evaluation, and other necessary support services. The goals of this interaction are to inform the person that they may have been exposed to COVID-19, assess their medical condition and other risk factors, and gather information for continued monitoring and support. Developing trust and a warm, empathetic rapport, while maintaining a professional relationship, is key to providing effective support and collecting accurate information to inform the next steps in the contact tracing investigation.



New York's (left) and Massachusetts' (right) ad campaigns to get people to answer their contact tracers' calls.

Community Spread

THE SUCCESS of a case investigation and contact tracing program hinges on a community's level of participation. CDC advises local jurisdictions to communicate clearly with the public to generate an understanding and acceptance of case investigation and contact tracing because, for many community members, this may be the first time they have engaged with public health personnel.

Jurisdictions should consider using all available communication channels to regularly reinforce these messages, including television, radio, and social media, along with official websites.

Reading Between the Lines

The CDC's recommended script includes not only the questions contact tracers should ask but also the reasoning behind their inquiries.

Reason for call: I i Are - It has come to our attention that you may have yο, been recently exposed to COVID-19. ma - Has anyone already talked to you regarding - Wh your possible COVID exposure? If so, who? Some of the early symptoms of COVID-19 can look - Wh similar to other illnesses, and sometimes, people have no symptoms. You may have been Wh exposed by someone who had no idea they were 0] sick. D٥ - In order to stop COVID-19 from spreading in the community, we follow up with people who have been exposed and work with them to make sure they get care if they need it. We also ask them to watch for symptoms and stay separate from others so that they don't spread it by accident, if they start to get sick. - Someone cared enough about you to make sure that you were able to get this information, and the testing and medical care necessary to keep you, your family and others healthy. - I would like to review some important information and questions with you so we can provide you with support and work together to stop the spread of COVID-19 in our city/ county/town.

Source: CDC



Questions We Had for DOH

- We asked whether contact tracers are provided with scripts to use during their follow-up calls with close contacts; however, the Health Director did not know if the department's contact tracers used scripts, but said, if scripts are available, they would likely be provided as part of its training program.
- Does DOH consider cultural differences/ considerations with each close contact?
- We were not able to review the scripts for DOH's case investigators and contact tracers.



CDC recommends that all close contacts be educated about COVID-19 symptoms to monitor for and be instructed to promptly report any new symptoms to public health authorities and seek medical care when necessary. If resources permit, CDC recommends testing of all close contacts where appropriate.

CDC's Notification of Exposure: A Contact Tracer's Guide for COVID-19 provides suggested communication approaches for local health jurisdictions to consider as they craft their own scripts for contact tracers which CDC recommends should also address local needs, including available resources, cultural nuances, exposure sites, and epidemiological data. While each contact tracer will need to make an individual determination as to the best approach for each interaction, CDC suggests that contact tracers discuss potential COVID-19 symptoms and underlying health conditions; whether a referral for medical care or testing is appropriate; the parameters and importance of quarantine recommendations; and any other questions or concerns in addition to other case investigation and contact tracing topics.

COVID-19: Quarantine vs. Isolation

QUARANTINE keeps someone who was in close contact with someone who has **COVID-19** away from others.





If you had close contact with a person who has COVID-19



· Stay home until 14 days after your last contact.



• Check your temperature twice a day and watch for symptoms of COVID-19.



 If possible, stay away from people who are at higher-risk for getting very sick from COVID-19.

ISOLATION keeps someone who is sick or tested positive for COVID-19 without symptoms away from others, even in their own home.





If you are sick and think or know you have COVID-19



- · Stay home until after
 - At least 10 days since symptoms first appeared and
 - At least 24 hours with no fever without fever-reducing medication and
 - Symptoms have improved



If you tested positive for COVID-19 but do not have symptoms



- · Stay home until after
 - 10 days have passed since your positive test



If you live with others, stay in a specific "sick room" or area and away from other people or animals, including pets. Use a separate bathroom, if available.

cdc.gov/coronavirus



Source: CDC



Questions We Had for DOH

- Are contacts monitored for quarantine compliance? How is that done? What steps are taken for contacts under self-monitoring who do not report to DOH as required?
- What is the department's approach if a close contact refuses to selfquarantine?
- We were not able to consider the department's monitoring protocols and tools and whether it has resources to allow for active daily monitoring of contacts.

Assessing Self-Quarantine Support Needs

CDC emphasizes that contact tracers should be helping contacts identify any need for social support during self-quarantine.

Self-quarantine prevents transmission to others and is critical to the success of contact tracing efforts. According to CDC, for most, selfquarantine can take place at home. If possible, contacts should be asked to voluntarily stay home, monitor themselves, and maintain social distance from others. However, for some of the most vulnerable populations in the United States, self-quarantine will be a hardship that may be impossible without additional assistance.

CDC recommends that contact tracers assess an individual's ability to self-quarantine in a safe environment that provides access to a private room and bathroom, as well as access to adequate food and water, among other considerations. Some contacts (for example, single parents, parents with children and toddlers, and other primary caregivers) may face challenges such as childcare or dependent adult care, that may affect their ability to self-quarantine. CDC notes that social services, housing, and other supportive services will be needed for those contacts who are unable to separate themselves from others in their current living situation. Jurisdictions can adapt CDC's Self-*Isolation and Self-Quarantine Home Assessment Checklist* to evaluate individuals' ability to safely isolate or quarantine in their homes.

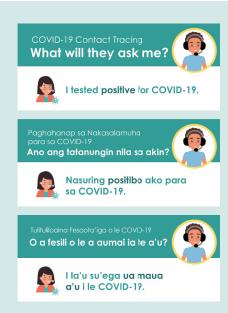
The North Carolina Department of Health and Human Services' COVID-19 contact tracing website includes detailed demographics of its contact tracing staff as well as how many of them are bilingual.

Lost in Translation?

ACCORDING TO our review of the available materials posted on the DOH website, Hawai'i lacks sufficient content regarding information for contact tracing in other languages. Other states like Washington and California provide contact tracing content, including posters, flyers, and various infographics in many other languages for their communities. We were also unable to determine whether DOH has contact tracers who are proficient in other languages in order to communicate with cases and close contacts for whom English is not their primary language.

(Right) Washington State provides contact tracing content in 10-plus languages.

Source: Washington State Department of Health





CDC recommends that all contacts who agree to self-quarantine will ideally receive active daily monitoring through real-time communication methods (e.g., telephone calls, video conferencing) to check-in on their temperature and COVID-19 symptoms throughout the length of their self-quarantine. However, if a jurisdiction's resources do not allow for active daily monitoring, contacts may be asked to self-monitor and communicate remotely (e.g., email, recorded video, telephone message, text, monitoring apps) to notify public health authorities of their health status and promptly communicate any new symptoms or symptoms of increasing severity. CDC also includes a template "daily temperature/ symptom log" that can be provided to contacts to aid in self-monitoring.



CDC's Interim Guidance states that contacts who remain asymptomatic for 14 days after last exposure can be notified of their release from monitoring and provided general health education in their primary language.

What Does It Take to Become a Contact Tracer?

To ensure compliance with quarantine orders, contact tracers need to be able to gain the trust of the contact during a time of great stress and may need to employ case management skills to link the individual who is being asked to quarantine to additional services and supports—like groceries, safe housing, behavioral health services, or child care—to help reduce barriers to effective quarantining. Case investigation and contact tracing can be handled by one properly trained person when the number of people diagnosed with COVID-19 and their close contacts can be interviewed by the staff member within 24 hours of being reported to the health department. When the number of reported daily cases does not allow for case interviews within 24 hours, a divided approach employing additional staff can provide a focused scope of activity and streamline the training competencies for the surge workforce. One staff member (case investigator) interviews and elicits contacts from a patient diagnosed with COVID-19, and additional staff members (contact tracers) notify and follow-up with the patient's contacts.

CDC suggests that one way health departments can quickly scale up surge capacity for case investigation and contact tracing is to specify two explicit jobs tasks for designated staff.

Case investigation staff:

- Interview clients with COVID-19
- Obtain information about their close contacts
- Monitor the clients for COVID-19 symptoms
- Connect clients to resources to support self-isolation

Contact tracing staff:

- Notify close contacts of their potential exposure
- Refer them to testing
- Monitor them for COVID-19 symptoms
- Connect contacts to resources to support self-quarantine

Case Investigator

Case investigators conduct interviews of patients with confirmed or probable COVID-19, with a focus on motivational interviewing and cultural competency. Interviews should be guided by standard protocols and include providing disease-specific information; assessing signs and symptoms, and underlying health conditions; discussing symptom onset to determine window period for contact elicitation and exposure risk for close contacts; discussing work, social, recreational, and community activities to identify who may have been exposed; eliciting information on close contacts, including names, exposure dates and locating information; and assessing support needs to maintain health and compliance during self-isolation.

Making the Call

ACCORDING TO CDC, the knowledge and skills needed for case investigation and contact tracing staff include but are not limited to:

- ☐ Keen understanding of the need for patient confidentiality and the ability to conduct case interviews with care in order to protect confidentiality and to conduct contact tracing without disclosing the identity of the case.
- ☐ Understand and explain in plain language the terminology associated with COVID-19 and principles of exposure, infection, including pre-symptomatic and asymptomatic, infectious period, potentially infectious interactions, symptoms of disease, types of tests used to diagnose infection, and available prevention and control interventions.
- ☐ Tactful interpersonal skills, cultural sensitivity, and language and interviewing skills that allow them to build and maintain trust with clients and contacts.
- ☐ Basic skills of crisis counseling and the ability to confidently refer clients and contacts for future care.

- ☐ Resourcefulness in locating and communicating with clients and contacts who may be difficult to reach or reluctant to engage in conversation.
- ☐ Awareness of the sensitivities surrounding immigration status and how this can be a barrier to case investigation and contact tracing activities.
- ☐ Understanding of when to refer individuals or situations to medical, social, or supervisory resources.
- ☐ Ability to help clients and contacts identify any needs they may have for social support during selfisolation/self-quarantine.
- ☐ Ability to collect basic standardized surveillance data per protocols.
- ☐ Understanding of when the use of public health legal authorities may be necessary and how to notify the appropriate public health officer for authorization.

- ☐ Case investigator and contact tracer recruitment should focus on identifying people with the following attributes:
 - Ethical and professional conduct
 - · Active listening
 - · Open communication
 - · Critical thinking
 - · Negotiating skills
 - · Problem solving
 - · Cultural humility and competency
 - Fluency in non-English languages for communities where English is not the primary language
 - · Emotional intelligence
 - · Flexibility and adaptability

Case investigators facilitate testing and referral to healthcare services and resource care coordination, as indicated. They may conduct home-based specimen collection and provide recommendations for self-isolation and review of daily monitoring procedures. They also conduct daily monitoring during self-isolation—temperature, signs/symptoms, use of fever-reducing medications—via electronic tool (e.g., smartphone app, case management software) or other designated mechanism until patient is no longer infectious.

Suggested Surge Capacity Workforce with Required Training:

Public health graduates or current students (MPH and Bachelors), retired registered nurses, health educators, social workers, medical or nursing students, patient navigators, community health outreach workers/promoters, community members with emotional intelligence, good communication and problem-solving skills.

Full House

DOH's math on its efforts to support COVID-19 patients in need of a place to stay doesn't add up.

SELF-ISOLATING and self-quarantining are important actions necessary to help slow the spread of COVID-19, requiring those who are self-isolating or self-quarantining to keep to themselves, apart from family and others in their living unit, for the entire time during which they are asked to self-isolate or self-quarantine. In practical terms, people who are self-isolating or self-quarantining should have a separate area to sleep and, if possible, a separate bathroom that is not shared with other family members. It also means that food, including groceries, and medications need to be delivered to people who are self-isolating and selfquarantining.

During an August 18 interview, we asked the Health Director if the department makes arrangements for people who are unable to self-isolate or self-quarantine in their homes. He replied that, while the figure may vary dayto-day, around 40 individuals are residing in hotel rooms secured by DOH to accommodate those who were not able to self-isolate or selfquarantine at home. When we questioned the Health Director about the number of rooms that DOH had available to house so many people, he replied, "Believe it or not, for the cases we have, in the vast majority of cases, self-isolation or selfquarantine can be accomplished in the home."

But what people want to do may be contrary to what they can do. Assuming just 100 new cases per day and, on average, 2 close contacts per each person who tested positive, 300 people may be asked to self-isolate and self-quarantine each day. Over the course of 14 days, that's 4,200 people who may be self-isolating and selfquarantining. We question the Health Director's assumption that, out of such a large number of people, only about 40 people are unable to selfisolate or self-quarantine in their homes. And, if the average number of cases is more than 100 and/or the average number of close contacts is more than 2, the number of people who should be self-isolating and self-quarantining only raise more questions about the department's ability to provide needed support services.

Contact Tracer

Contact tracers communicate with contacts to notify them of exposure, provide disease and transmission information, and gather data on demographics, living arrangements, and daily activities. They ask about signs/symptoms and underlying medical conditions; provide referrals for testing (if appropriate); may conduct home-based specimen collection and provide recommendations for self-quarantine; and review daily monitoring procedures. They also assess supports necessary to maintain compliance during self-quarantine. Conversations with contacts should be guided by standard protocols.

Contact tracers conduct daily monitoring during self-quarantine temperature, signs/symptoms, use of fever-reducing medications—via electronic tool (e.g., smartphone, case management software) or other designated mechanism, until 14 days after last potential exposure, and referral to healthcare if contact becomes symptomatic.

Suggested Surge Capacity Workforce with Required Training:

Community health outreach workers/promoters, medical assistants, teachers, librarians, college students, customer service-oriented professionals such as flight attendants, call center employees, restaurant, and other service industry employees.

The CDC suggests that case investigation and contact tracing training for COVID-19 include a blend of knowledge-based and skills-based coursework. Knowledge-based training includes disease-specific information, client-centered counseling and motivational interviewing techniques, assessment of risk that includes referral of high-risk individuals and complex cases to clinical staff, assessment of other social support needs, and approaches to facilitate confidential client communication. Skills-based training utilizes interview technique modeling, scripted language using interview guides, case scenarios, and role-playing. Both types of coursework are followed by on-the-job training supported by experienced staff.

On May 13, 2020, DOH announced that it was partnering with the University of Hawai'i (UH) to create a program to train personnel and community health workers to support DOH in conducting COVID-19 contact tracing. The agreement is funded with \$2.5 million in Coronavirus Aid, Relief, and Economic Security (CARES) moneys. In comparison, New York partnered with John Hopkins University to develop a contact tracing training program that is available on Coursera, a worldwide online learning platform, at no cost and takes approximately seven hours to complete.

UH's training program offers online classes in two tracks, Track 1 for clinical professionals and Track 2 for those without a clinical background. Track 1 takes 1.5 days to complete, Track 2, 6 weeks. Both tracks at UH require all candidates have an undergraduate degree and all training materials are approved by DOH. The Health Director noted that the department prefers that potential contact tracers have a clinical background since they understand many of the issues contact tracers face, such as private matters related to the case and building trust with the contacts. The Health Director was unable to address any of our other training-related questions, referring us to the new DIB chief, who was unavailable for us to interview.

DOH was unable to provide detailed information regarding its onboarding (e.g., number of hours to onboard new hires, additional onboard training, etc.) of its UH-trained new hires. According to the Health Director, onboarding of new contact tracers will occur in 20-person batches. When we asked approximately how long will it take for DOH to onboard each 20-person batch, the Health Director said that



Questions We Had for DOH

- Approximately how long will it take for DOH to onboard each 20-person batch?
- Do contact tracers need additional training once onboarded?
- What materials are provided to the contact tracers during onboarding?
- Did DOH consider utilizing online contact tracing training programs like the one developed by John Hopkins University? What is being taught by UH in its 6-week program for people without clinical backgrounds that is different from online training programs that are much shorter in duration?
- Have all of the contact tracers, including the Hawai'i National Guard soldiers. completed one of the **UH** contact tracing training courses? If not, what training is the department providing?

they plan to bring 20 new individuals per week. The Health Director noted that the department's onboarding efforts are dependent upon their limited number of contact tracing supervisors. In addition to onboarding UH-trained contact tracers, the department explained surge staff from other departments can be temporarily assigned, such as nurses.

We had planned to ask additional questions that include whether DOH considered any national guidance to determine the timeline for the two different contact tracing training tracks; whether the roles and responsibilities for contact tracers with and without clinical backgrounds differ; whether the DOH is still requiring all contact tracers to go through the UH contact tracing training program; and, in contrast to other states' contact tracer training, like one developed by John Hopkins University, why the UH's training for contact tracers without a clinical background takes 6 weeks to complete.



The COVID-19 pandemic requires significant ramping up of contact tracing capacity and funding. According to the National Academy for State Health Policy (NASHP), state health departments are taking a variety of approaches to scale up contact tracing that generally fall into three categories: in-house, partnering, and contracting. NASHP created an interactive map that highlights each state's approach to scale up contact tracing.

In-House: State/local officials lead, hiring or recruiting volunteers as needed. Partnering: State leads efforts but relies on partners for training/staffing. **Contracting:** The state contracts with a company or organization for contact tracing work/hiring.

Source: NASHP

How Many Contact Tracers Does Hawaiii Need?

According to CDC, estimates of the number of case investigators and contact tracers needed in a particular community may be large and will vary depending on a number of factors, including the number of COVID-19 cases reported each day, number of close contacts elicited per case, languages spoken in the community, and the amount of time and resources needed to notify and monitor clients and contacts. CDC provides an example of a third-party tool that health departments can use to estimate staffing for contact tracing. The tool considers multiple parameters, including, but not limited to, new cases per day, number of close contacts, and days spent on follow-ups for estimating staff resources for contact tracing. One of the tools CDC recommends for estimating contact tracing workforce needs is an estimator provided by George Washington University and their partners, with the Association of State and Territorial Health Officials and the National Association of County and City Health Officials (NACCHO).

Under non-emergency situations, the NACCHO Contact Tracing Workforce Estimator recommends 15 professionals per 100,000 population. This staff includes epidemiologists, disease investigation specialists, public health nurses, community health workers, and others typically involved in contact tracing activities. Given the magnitude of COVID-19, the need to quickly complete contact tracing (within hours versus days for other communicable diseases), and the demand for these services across all areas of the country at once, NACCHO estimates that twice as many professionals will be needed, 30 professionals per 100,000 population. The estimator, like others of its kind, also allows for health departments to include variables according to the circumstances and needs of their location, such as setting the daily cases at the county or state level to plan for future contact tracing workforce needs. Local factors, such as in-person versus telephone or technology supported contact tracing and community social or language needs, can affect the contact tracing workload.

Applying the baseline to Hawai'i's population of approximately 1.4 million, the state would need around 420 contact tracers. DOH's contact tracing staffing even falls short of the NACCHO baseline estimate during optimal, non-emergency conditions, which should be around 210 contact tracers. Since DOH officials did not respond to our request for information, we were unable to determine if DOH used an estimator or followed any other guidance to calculate the number of sufficient contact tracers for Hawai'i and, if they did, what factors they included in their calculations.



Questions We Had for DOH

- Does DOH track the number of cases and contacts it failed to reach?
- How many attempts will an investigator/tracer make to get a hold of a case/close contact before abandoning efforts?
- Do the case investigators/ contact tracers assess the case/contacts social support needs during this first interview?
- We have questions about the data that the department is collecting and its ability to use that data. In our 2017 Audit of the Disease Outbreak Control Division (DOCD) of the Department of Health, the same division that is in charge of DOH's contact tracing activities, we found the division did not have adequate documentation and consistent information relating to responses to certain outbreaks that we examined. However, the DOCD Chief and the DIB Chief were not available to speak with us, and we were not able to review the COVID-19 specific data maintained by the department.



Question We Had for DOH

We were not able to ask DOH staff if they track any of these metrics and what plans, if any, they had to make them publicly available.

Is Contact Tracing Working in Hawai'i?

Routine review of both process and outcome metrics is crucial for case investigation and contact tracing success. CDC emphasizes that examining data regularly can allow local health authorities to identify and rapidly address issues, change internal case investigation and contact tracing processes, and more easily pivot when new high-risk populations are identified. Some of the data CDC recommends local jurisdictions provide in evaluation reports include:

Data on Individual Investigators and **Contact Tracers**

- · Number of case investigations assigned
- · Number of clients interviewed
- Number and percent of clients interviewed ≤ 24 hours from report to health authority
- · Number of case investigations closed
- Number and percent of case investigations in which at least one close contact was elicited
- Median number of days from assignment of investigation to interview
- Total number of contacts elicited from case investigations
- Median number of contacts elicited per case interview, among cases where at least one contact was elicited
- Number of contacts notified during review period and percent out of total number of contacts
- Number of referrals to social support
- Number of referrals for clinical consultation

Outcome Measures

- · Number of Case Investigations
- · Number of contacts interviewed
- Number and percent of new COVID-19 cases arising from quarantined contacts
- Number of contacts self-quarantined as a result of contact tracing
- · Number and percent of clients who completed self-isolation period
- Number of contacts who completed 14-day self-quarantine

According to its website, DOH's contact tracing dashboard, "COVID-19 Response, By the Numbers" is supposed to be updated weekly; however, when we accessed it in mid-August, it had not been updated in more than two weeks. According to the Health Director, the department has been collecting additional data and is in the process of updating its dashboard. He did not specify what additional metrics the department would be posting nor did he indicate when this update would be completed. We planned to inquire about metrics DOH uses to evaluate the success of its contact tracing efforts to date; however, we were not able to be interview the DOH staff responsible for overseeing DOH's case investigators and contact tracers in time for this report.

On August 21, DOH replaced its contact tracing dashboard with "COVID-19 Contact Tracing Numbers," which features even less data, just three: Contact Tracers Working on the Neighbor Islands, Contact Tracers Working on O'ahu, and Support Staff.

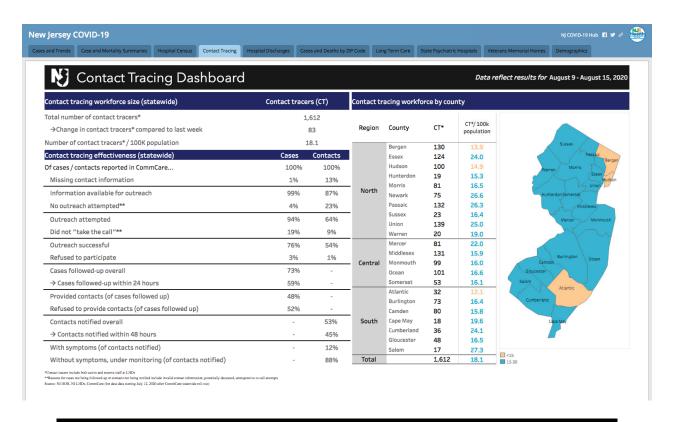
Minimal Data

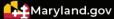
A recent update of DOH's contact tracing dashboard features even less data than the previous one





Updated Friday, August 21

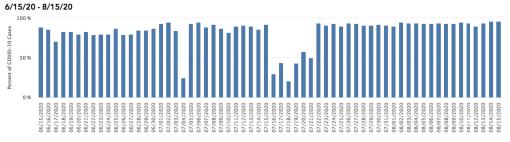


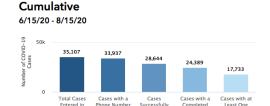


Maryland covidLINK Contact Tracing Performance Measures

First Outreach Within 24 Hours of Case Entered into CovidLINK

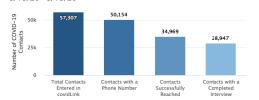






Cases Reached and Interviewed -

Contacts Reached and Interviewed -Cumulative 6/15/20 - 8/15/20



Tracing the tracers: New Jersey's and Maryland's dashboards feature performance measures for and locations of its contact tracers.

In contrast, other states' contact tracing dashboards feature a plethora of performance and outcome related measures. New Jersey's, for example, includes not only detailed data on its contact tracing workforce's size and the specific location of personnel, but it also includes data on the effectiveness of their efforts. Notable measures include the percentages of cases that provided contacts and refused to provide contacts as well as the percentages of contacts who had symptoms and those who did not. Maryland's COVID-19 contact tracing dashboard highlights "First Outreach Within 24 hours of Case Entered into CovidLink," the state's contact tracing system. According to CDC, making first contact with a case within 24 hours of notification is a key to successful COVID-19 contact tracing efforts.



Point of Contact: Louisiana's dashboard lists the settings were people were exposed to the virus.

Los Angeles County Non-Residential Settings Meeting the Criteria of Three or More Laboratory-confirmed COVID-19 Cases

(including workplaces, food and retail stores and educational settings)

Obs	Setting Name	Address	Total Confirmed Staff	Total Non-Confirmed Symptomatic Staff
1	4 Earth Farms	5555 E Olympic Blvd, Commerce, CA, 90022	9	5
2	9 To 5 Seating LLC	3211 Jack Northrop Ave, Hawthorne, CA, 90250	11	4
3	99 Cent Only Stores Warehouse and Corporate Office	4000 Union Pacific Ave, Commerce, CA, 90023	28	0
4	A & A Truck and Trailer Supply, Inc.	5635 E Washington Blvd, Commerce, CA, 90040	6	0
5	A-Co Temporary Power, Inc.	13244 Raymer St, North Hollywood, CA, 91605	8	0
6	ABM Janitorial Services	515 S Flower St, Los Angeles, CA, 90071	6	0
7	APM Terminals	2500 Navy Way, San Pedro, CA, 90731	4	0
8	AT&T Call Center	12911 183rd St, Cerritos, CA, 90703	3	0
9	AT&T Call Center Cerritos	12900 Park Plaza Dr. Cerritos. CA. 90703	3	0

^{*} Not shown here are the total number of confirmed non-staff linked to the following outbreaks.

Los Angeles county lists the names of specific establishments, their addresses, and the number of confirmed cases.

How is the community doing?

Other states' COVID-19 websites feature detailed data and other information on the overall health and status of the community at large. The additional information provided includes data on cluster locations, testing turnaround times, detailed hospital capacity information, and ventilator usage. Louisiana, for example, tracks outbreaks throughout the state, listing settings (bar, casino, restaurant, wedding, etc.) and the number of outbreaks and cases associated with those settings. On the other hand, Los Angeles County's COVID-19 website features not only the setting's specific name but its address as well as total confirmed cases on staff and total non-confirmed symptomatic staff.

On August 18, 2020, Hawai'i News Now reported on DOH's release of information on COVID-19 clusters that day. The web version of the story includes a listing, similar to what Louisiana reports, identifying general categories of clusters such as gyms, preschools, and restaurants as well as more specific locations such as health plan offices, City and County of Honolulu offices, and the O'ahu Community Correctional Center. The news story did not identify where this information can be accessed by the public, and we could not find the data in subsequent searches of DOH's COVID-19 webpages. While this release of additional pandemic-related data is a welcomed development, if data is not easily accessible to the public, it has little value.

Unable to Make Contact?

At an August 18, 2020, news conference to announce the ramping up of the Department of Health's contact tracing efforts, the Health Director admitted that the surge in COVID-19 cases is so pervasive that tracing alone will not do much good. In an August 19, 2020, Honolulu Civil Beat article, "Hawaii Is Ramping Up Its Virus Tracing Program. The Health Director Says It's Too Late," the Health Director said the department now had about 126 contact tracers statewide, including 96 on Oahu, and 13 supervisors and administrative support personnel. However, he was also quoted as saying, "No amount of contact tracing will contain the spike that we've seen. What's going to stop this disease from spreading in Hawaii is not the number of contact tracers, it's going to be our behavior."

According to the article, the Health Director's remarks came as officials made a push to show they are now significantly, although belatedly, stepping up the state's contact tracing capacity. At the same news conference, the recently appointed DIB Chief announced the restructuring of the department's contact tracing effort. Among the changes were the prioritization cases where there are rapid outbreaks.

But are these measures too little, too late? According to CDC, case investigation and contact tracing activities should be implemented at two distinct points in an epidemic: First, early on in an epidemic, during the containment phase, case investigation and contact tracing are needed to stop transmission and prevent a large outbreak from occurring. Second, once the community enters the suppression phase of the epidemic. According to CDC, when a jurisdiction does not have the capacity to investigate a majority of its new COVID-19 cases, case investigation and contact tracing may not be the most effective approach. CDC says, at that point, jurisdictions should consider suspending or scaling down contact tracing activities and reimplementing strict mitigation measures (such as stay-at-home orders, business closures, and school closures) until transmission begins to decline.



From First to Worst

Hawai'i had the lowest number of COVID-19 cases per capita of any state in the nation. Now the virus is spreading at a faster rate than anywhere else in the nation and a California Congresswoman, whose committee has oversight over public health and quarantine, wants to know what happened.

IN AN AUGUST 19, 2020, LETTER to Governor David Ige, U.S. Representative Anna Eshoo requested detailed information about Hawai'i's contact tracing program that has been in place since the COVID-19 outbreak was declared an emergency. Congresswoman Eshoo, a California Democrat, is Chairwoman of the House Subcommittee on Health, which has jurisdiction over public health and quarantine, among many other areas. Specifically, Congresswoman Eshoo inquired about how Hawai'i is using the more than \$50 million of Coronavirus Aid, Relief, and Economic Security (CARES) Act moneys appropriated through the CDC's Epidemiology and Lab Capacity Grants program. This funding is intended to be used to develop, purchase, administer, process and analyze COVID-19 tests, scale-up laboratory capacity, trace contacts, support employer testing, and support other testing-related activities.

"Due to the numerous instances of conflicting and false information being released to the public by your Department of Health regarding the number of contact tracers employed and their capabilities, what specific actions will you take to restore the integrity of the Department of Health?" Congresswoman Eshoo wrote.

Many of Congresswoman Eshoo's other questions to the Governor were identical to ones we planned

to pose to DOH officials (see "Questions for DOH" featured throughout our report). Some of these include:

- · What is the training process and qualifications for contact tracers?
- · How many contact tracers have been trained?
- How many have volunteered?
- · What are the duties of contact tracers as outlined by the state?
- · What are the benchmarks that must be achieved with contact tracing of each case?

Congresswoman Eshoo also inquired about the State's plans and timelines, its testing efforts, as well as the amount of federal dollars that remain unspent and why.

According to the August 19, 2020, Honolulu Civil Beat article "California Congresswoman Wants Answers On Hawaii's Virus Response Effort," when Governor Ige was asked about Congresswoman Eshoo's letter, he responded that he had not had time to formulate a full response to the letter but said that \$2.5 million of the federal funds is being used to train contact tracers through the University of Hawai'i, and \$10 million is being used to increase testing and surveillance capacity, including systems for data management and lab testing equipment.