COVID-19 Public Health Action Webinar

How to Control the Coronavirus and Bring Back Hawaii’s Economy

Presented by Tim Brown and Sumner La Croix

Wednesday, April 29, 2020
1:00 PM to 2:00 PM
1. For all questions, please utilize the Chat box or Question & Answers box located at the bottom of your screen.

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How to Control the Coronavirus and Bring Back Hawaii’s Economy:

Sumner La Croix  
Research Fellow, UHERO

Tim Brown  
Senior Fellow, East-West Center
A four step plan for getting back in business

1. Stem the influx of new infections
   • Travel ban

2. Slow spread in local population
   • Stay-at-home, social distancing and masks

3. Test, trace and isolate

4. Monitor and gradually relax restrictions when conditions allow
We’ve been closed for a month & a half

• What have we accomplished?

Timeline
• Mar 16
  School shutdown
• Mar 19
  Closing bars, restaurants
• Mar 23-25
  Stay-at-home HNL/Maui
• Mar 26
  Quarantine for travelers
There is evidence behaviors have changed...

Google Community Mobility Reports

- **Retail & recreation**: -55% compared to baseline
  - Mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters.

- **Transit stations**: -74% compared to baseline
  - Mobility trends for places like public transport hubs such as subway, bus, and train stations.

- **Workplaces**: -47% compared to baseline
  - Mobility trends for places of work.
Transmission shifted from travel to community

Hawaii COVID-19 epi curve by exposure and date of symptom onset

37.5% community overall

70% community in April
...but # down
We listed 4 criteria to start phased reopening

- A sustained reduction in new cases for at least 14 days
- Hospitals in each county can safely treat all in need (COVID & non-)
- Sufficient capacity to test all people with symptoms
- Capacity for:
  - Tracing all close contacts of those testing positive
  - Active monitoring of isolation for those COVID+ and their close contacts

**Update: extend these 4 with capacity for:**
- Active surveillance of COVID-19
- Actively monitoring quarantine of all visitors and returning residents
Why can’t we just reopen today?

• This virus is extremely contagious

• We’ve seen this in Hawai‘i
  • Maui Memorial – 57 cases
  • Kona McDonald’s – 36 cases

• We were too slow in responding to these outbreaks
Why can’t we just reopen today?

• This virus is extremely contagious
• We’ve seen this in Hawai‘i
  • Maui Memorial – 57 cases
  • Kona McDonald’s – 36 cases
• We were too slow in responding to these outbreaks
• The potential for rebound is high

Source: covidactnow.org/us/hi
New Zealand’s elimination strategy

• Border controls with high quality quarantine of incoming travelers
• Rapid case detection identified by widespread testing, followed by rapid case isolation, with swift contact tracing & quarantine for contacts
• Intensive hygiene promotion (cough etiquette & handwashing) and provision of hand hygiene facilities in public settings
• Intensive physical distancing, currently implemented as a lockdown (level 4 alert) that includes school and workplace closure, movement and travel restrictions, and stringent measures to reduce contact in public spaces, with potential to relax these measures if elimination is working
• A well-coordinated communication strategy to inform the public about control measures and about what to do if they become unwell, and to reinforce important health promotion messages.

Source: Baker et al, New Zealand’s elimination strategy, NZMJ Apr 3 2020
New Zealand’s elimination strategy... highlighting Hawaiʻi’s gaps today

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What must we do to prepare for reopening?

• Be able to rapidly identify any outbreak through testing & surveillance
  • Rapid testing of possible cases and contacts
  • A sound surveillance system
  • Anticipate the virus by monitoring high risk settings
• Have the ability to quickly crush the growth of clusters
  • Identify close contacts
  • Reach them quickly to get them into isolation
  • Monitor their symptoms and compliance with isolation orders
  • Enforce quarantine on incoming travelers
• Enlist the full support of the public to contain further spread
Testing and surveillance needs

• Our testing strategy needs to be systematized for rapid detection
  • Coordinate the various groups doing testing
  • Build rapid turnaround testing capacity
  • Test everyone with COVID-like symptoms

• Anticipate the epidemic
  • Surveillance in health care settings, nursing and long term care facilities, prisons
  • Explore COVID testing of wastewater
Testing and surveillance needs

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  - Singapore shows the price of failing to do so

From 50-60 per day in March to 500-1000 per day in April
Crushing epidemic growth

- Key tool is **contact tracing**
  - Rapidly identify close contacts and get them into isolation
- Current system too slow
  - Staffing increases & surge capacity
    - 20 to 40 contacts not unusual
    - Target should be same day reach
  - Should take advantage of emerging **e-technologies**
    - Apple-Google, MIT, COVIDTrace
- Better **quarantine & isolation monitoring**
  - Both personnel & e-technologies
Engaging and enlisting the public

• The State’s communication on the COVID situation has been poor

• The public must **understand**
  • Why this is going to take some time
  • Need for continued social distancing
  • Their role in protecting the vulnerable
  • Why quarantine is a social responsibility
  • Why masks are a necessity
What should we expect from government?

• A cohesive testing strategy and the necessary capacity for rapid testing

• The contact tracing capacity to address outbreaks and surges
  • Estimate needs including tracing, monitoring, data analysis and public dissemination
  • If tourism reopens, will need even more personnel – plan for it now and build it

• Coordination and a plan for reopening safely between State and counties
  • Anticipate and address any legal issues and challenges on quarantines, apps, etc.
  • Separate plans for each sector of the economy

• Transparency and public communication
  • Let us know what’s happening and give clear guidance – no more opacity
  • A single clear coordinated communication mechanism
What should we expect from ourselves?

• We accept the new normal gracefully
  • Social distancing and masks will be part of our life for the next year or two
  • If exposed, isolating ourselves is a responsibility to protect our ‘ohana

• We hold government and businesses accountable for their responses
  • The public and worker associations & unions demand protective PPE & policies in health care settings and nursing homes
  • The public and civil society groups work to improve the safety, access to health care and income of front-line workers, the homeless and prisoners

• If you see something, say something
  • When you see workers or the public being put in unsafe situations, speak up

• Accept responsibility for protecting others, esp. kūpuna
Once the pieces are in place, how do we make the transition?
The Hawai‘i Economy: Deep into Depression?

Total shutdown of the tourism economy
- 23 percent of total GDP (output)—249,000 tourists/day previously.
- Compare this to the -2.26 percent decline in real GDP in 2009 during the Great Recession

Unemployment at 25+ percent ... and likely to increase
- Roughly half due to tourism shutdown.
- The other half is due to the stay-at-home order, affecting sectors serving Hawaii’s resident population—shops, restaurants, professional services, .
- PPP loans/gifts from federal government could lead some businesses to bring back employees to qualify for this relief.
- New UHERO business survey shows the most vulnerable people are most likely to have lost jobs.

This crisis is different from earlier economic crises as the state government has taken deliberate measures to put the economy to sleep in order to restore the health of the population. Main short-term problem for government is providing relief and controlling the epidemic. Main long-term problems for government(s) are gradually reopening the economy and reorganizing government services and regulatory frameworks.
Federal and state governments: How are they dividing up the tasks of controlling the epidemic and providing relief?

**Federal Government.** Provide relief and targeted assistance to health system. Ability to borrow trillions of dollars in financial markets and to print money (i.e., buy the bonds government(s) issue).

**State government.** Responsible for managing the epidemic within a state.

**Contested Federal Responsibilities:** Facilitating production, qualification, and distribution of testing resources and other PPE and medical equipment; expanding medical facilities.
State of Hawai‘i’s Plan to Reopen the Economy

Alan Oshima (HEI) and Dr. Mark Mugiishi (HMSA) are leading the efforts to develop a plan for the State of Hawai‘i’s response to the coronavirus epidemic.

For more details see “A. Oshima ppt presentation” at: https://www.capitol.hawaii.gov/specialcommittee.aspx?comm=cov&year=2020

Government announcement of tentative reopening plans and standards will help businesses, suppliers, employees, and customers to plan. Businesses often can not just reopen over night. Most plans now have 4-5 reopening phases.

Transparency and open televised meetings are important. HI House and Senate COVID-19 committee meetings are televised. In Australia, meetings w.r. COVID-19 of the Prime Minister and the premiers of the 8 state governments are public, open and televised. Four mayors and governor could follow Australia’s lead and televise their coordination meetings.
Principles for Reopening State Economy

Opening tourism economy will take longer than non-tourism economy ... but planning for the tourism reopening needs to occur ASAP on a dual track.

Transition to public use of more effective surgical masks when widely available.

Reopening needs to be gradual, well monitored, and coordinated.

Trial and Error – pull back if pattern of new outbreaks.

Learn from first-movers – they include countries and US states that open schools, businesses, and sporting activities before Hawaii.

Vulnerable populations still urged to stay home whenever possible.
  • This could dampen responses to reopening -- 65+ are 18 percent of population.
  • Others who “feel vulnerable” or are just cautious may also stay home more.
Key to Reopening: Reorganizing Business Operations

**Why reorganization?** To meet demand for safety by employees and customers.

**Capability to reorganize** varies across businesses:
- Some will radically reorganize their entire operations,
- Many will make changes to ensure social distancing,
- Others will find such changes untenable and will either have to wait for safer times or close their doors.
First sectors: Social distancing can be achieved by new rules and reorganized business practices.

Germany reopened numerous small businesses last week. They include small retail stores, bookstores, bike shops, car dealers, furniture stores. Texas reopened nonessential businesses for which product orders can be made online/phone and picked up from the store at curbside. Florida allows golfing with numerous restrictions to enforce social distancing. Ways to achieve social distancing include:

• Number of customers allowed in store at any one time is limited,
• Spacing emphasized inside business,
• Mask-wearing requirements enforced, by employer, employees, and customers.
• Gloves required for customers for some types of businesses,
• Temperatures taken at door for some businesses.

Malls and some shopping centers may want to limit number of parking spaces available.
Businesses with crowds of customers: Could Apple stores reopen?

Our retail stores are closed until March 27.

We are committed to providing exceptional service to our customers. For sales, go to apple.com or download the Apple Store app on the App Store. For service and support or Genius Bar, go to support.apple.com or call 800-275-2273.

We look forward to seeing you soon.
Pre-COVID-19 store crowds
Reorganizing business practices in Apple stores?

All 42 Apple stores in China have reopened.
  • Store architecture, new products, and big crowds made stores a “destination”.

Business reorganization ...
  • Limit number of employees and customers in stores,
  • Mandatory mask wearing by customers and employees.
  • People touching equipment?
    • Gloves could be provided at entrance and thrown out at exit,
  • Genius bar was already by appointment,
    • New social distancing arrangements? Separation panels as with cashiers?
  • Less mall traffic -- Renegotiate rent with malls and shopping centers,
  • Limited hours.
Businesses involving close personal contact

Many businesses and occupations rely on close personal contact—hair salons, massage, dentistry, optometry services, health services—and others where customers repeatedly use the same equipment, such as gyms. UHERO estimates 55,000 people in these jobs out of a workforce of 660,000.

There is certainly a role for industry associations to develop new standards of operation and for employees and private and public experts to review an industry’s proposed standards.

Businesses could consider monitoring the daily temperature of workers who have contact with multiple customers and of customers. Some businesses that already have strict safety standards – dentistry—might find it easier to reopen.
Reopening the Tourism Economy

Two necessary conditions that need to be satisfied.

(1) **Tourists** need to conclude that it is safe to visit Hawaii.

(2) **Residents** need to conclude that tourists are safe visitors, with only a small chance of contributing to Hawai‘i’s epidemic.

Step one will be satisfied sometime this spring when we have sufficient testing, contact tracing, and isolation measures in place.

Step two can only be satisfied if (a) residents are vaccinated or (b) an effective treatment emerges or (3) tourists are tested prior to arrival. It’s difficult to see option (3)—probably the fastest option—being implemented until late this summer or fall.
Testing of All Air Passengers Prior to Arrival

**Tourist Testing.** Potential visitors take a rapid, same-day antigen test or antibody test before they leave for Hawai‘i. Test could be conducted at:

- their doctor’s office,
- an urgent care facility,
- home airport,
- or other approved testing center.

Results sent to a cloud data service (keep your own copy too!) accessible by airlines and HI public health authorities.

State waives 14-day quarantine for passengers with positive antibody test or a negative antigen test.

**Severe Logistics:** 10 million tourists came to Hawai‘i in 2019. If tourists need a test before their flight to Hawai‘i and their flight back home, that would require 20 million tests. Even if tourism numbers were smaller, say 5 million people, and tests were only required to come to Hawai‘i, that would require 5 million tests annually. To date, only 4+ million tests in total have been conducted in the United States.
Public-private partnership could put this plan together

There are strong incentives for airlines, major hotels, testing facilities, and cloud services to put a feasible plan together. Airlines and other tourism businesses would have incentives to keep costs of the test down, as high-cost tests would depress demand for airline/hotel services.

The government should certify these arrangements as the key for the testing to work is that the government waives the 14-day quarantine at arrival.

Testing would be required for returning residents as well as visitors to ensure efficacy and non-discrimination.
Restart tourism with airport screening & quarantine only for those displaying symptoms?

This would not be viable until places that send us tourists bring their epidemics closely under control.

Airport screening in Hawaii would catch most of the people with symptoms (and place them in quarantine) but would miss asymptomatic carriers who could spread the virus in Hawaii.

People on airplanes originating from one city where the epidemic is under control often originate from a wide number of cities/states. This would be problematic if the epidemic is not under control throughout the country.

Large outbreaks could occur that would require extensive resources to contact trace and control.

There is a potential for this type of policy to create a distrust of tourists by residents, employee-employer conflict in the travel industry, and a decline in the already tenuous trust in state and county governments.
Reopening Schools? Denmark is the first ...
School Reopening in Hawai‘i?

Denmark has coordinated reopening its public schools for K-5 pupils with some parents returning to work. This has involved:

- Social distancing – smaller, separated, classes
- Hand washing a norm, with sanitizer everywhere.
- Cleaning of bathroom facilities, door handles, twice a day.
- Temperature monitoring; ill children staying home.
- No teacher gatherings in staff room.
- Plans for how to deal with outbreaks – which are inevitable.
- Recess play in small groups.

- HI: In person instruction -- two weeks on, two weeks off, with on-line instruction during alternate two weeks.
- HI: Meals in room, not in cafeteria to prevent crowding

Hawai‘i public schools and UH: Only online instruction until August 2020.

School Superintendent Kishimoto: Hawai‘i public schools will not reopen until there have been no new cases for 4 weeks. This is an extremely strict standard that probably will not be met until a vaccine is developed 12-18 months from now.
Permanent scarring of children who lose years of schooling due to school closures in pandemics

If we close schools for long periods, students could suffer permanent scars, i.e., less learning and earnings over their lifetime.

During the 1916 polio pandemic, officials in many states closed schools. Children ages 14-17 during the pandemic had less educational attainment in 1940 compared to their slightly older peers.

Use of people with positive antibody tests?

Concept
Allow employees with positive coronavirus antibody tests—obtained via a finger prick—to take jobs that require close contact with other workers or customers.

Serve in high-risk roles in health care system, roles that support community functioning for vulnerable populations, staff and manage retail stores and restaurants.

Challenges
Strength and duration of immunity protection are currently unknown.

Serious questions exist regarding the sensitivity and specificity of those being sold elsewhere.
Conclusion

In the absence of vaccine or treatment, Hawai‘i’s economy faces an extremely difficult situation, with recovery likely to be slow and prolonged.

At the end of the day, the demand for additional safety measures by workers and consumers will be a drag on the Hawai‘i economy that could persist for several years.

In the longer run the changed circumstances of firms, customers, and workers will encourage waves of innovation that will place the economy and society onto paths unknowable today.
Opening restaurants: A brief guide

Distance between tables – limits on number per table.
Disposable menus.
Virtual restaurant inspections by DOH.
DOH could issue temporary rules to regulate restaurant safety during the COVID-19 pandemic. Legislature could have rules sunset when vaccine is developed.
Build on guides to restaurant openings already developed in Georgia and Tennessee.
QUESTIONS?
Webinar Announcement

Family First: How to Support Your Keiki Learning from Home and Coping with Stress

Wednesday, May 6, 2020
1:00PM – 2:00PM