

**REPORT TO THE  
TWENTY-NINTH LEGISLATURE  
STATE OF HAWAII  
2018**

Sanitation Branch Annual Audit  
Sanitation and Environmental Health Special Fund  
Fiscal Year 2017

**Pursuant to Chapters 321-27.5 and 321-27,  
Hawaii Revised Statutes,  
Requesting the Department of Health to Submit an  
Annual Audit Report of the Sanitation Branch  
And  
Requesting the Department of Health to Submit a  
Report on the Status of the  
Sanitation and Environmental Health Education Fund**

**PREPARED BY:  
DEPARTMENT OF HEALTH  
STATE OF HAWAII**

**December 2017**

## **SANITATION BRANCH ACTIVITIES AND FINANCES DURING FY 2017**

### EXECUTIVE SUMMARY

The Sanitation Branch is one of the core programs of public health that affects the broadest range of health-related activities. Its programs are established by statutes and administrative rules as statewide programs. This report provides a broad overview of the functional role and activities of the Sanitation Branch, as required under Section 321-27.5, Hawaii Revised Statutes (HRS), that states, “The Department shall perform annual audits of the sanitation branch to be completed by November 30 of each year, and shall include an audit of:

- 1) Fees collected;
- 2) The number and results of sanitation inspections;
- 3) The number of training seminars held; and
- 4) The cost of training personnel in the sanitation branch.”

This report is also being submitted under Section 321-27(d), Hawaii Revised Statutes, which states that the Department “shall submit a report to the Legislature concerning the status of the Environmental Health Education Fund, including, but not limited to the amount of monies taken in and expended from the fund, and the sources of receipts and uses of expenditures...”

This report also includes a look at some of the major sanitation issues in Hawaii and how the Sanitation Branch is working to resolve these issues.

### BACKGROUND

The function of the Sanitation Branch is to promote and maintain a sanitary and healthful environment for the people and visitors of Hawaii by implementing legally required programs for:

- 1) Food protection;
- 2) Assessing and assuring that hospitals and medical facilities meet sanitation requirements;
- 3) Medical Cannabis;
- 4) Licensing of tattoo artists and embalmers; and
- 5) Regulating barber shops, beauty parlors, massage parlors, tattoo shops, mortuaries, public swimming pools, and public laundries.

The Sanitation Branch focuses on its food protection program which has evolved into a complex program concentrating on public health practices through education, partnerships, prevention, assessment and compliance.

Food is a significant element of Hawaii’s multi-ethnic culture and is a principal attraction for visitors to Hawaii. Food contamination presents the greatest risk to public health. The Sanitation Branch protects residents and visitors from exposure to food borne illnesses by

conducting inspections and assessments of food service establishments to ensure that the food served is safe to eat. Inspections are discussed later in this report. The branch has also issued 10,147 permits statewide to restaurants and other food establishments.

In addition, the branch promotes food protection through education. The Food Safety Consultation and Education Program plays a vital role in preventing food borne illnesses by developing and implementing food safety surveillance and control plans, and conducting educational activities to assist the food service industry and food handlers.

Staff training also is a significant element for maximizing efficiency and effectiveness to satisfy program performance objectives. Mechanisms are in place to provide continuing education as the branch updates and cross trains staff to keep up with technological and organizational changes.

A continuing challenge for the statewide Sanitation Branch is sufficient personnel to bring the ratio of food establishments to inspectors in line with the U.S. Food and Drug Administration's (FDA) recommendations of 150 food establishments per inspector that only conducts food safety inspections. FDA has determined that the ratio of 150 to 1 allows the inspector to conduct inspections more frequently to ensure food safety practices are maintained. FDA recommends high risk food facilities be inspected three times a year, twice a year for medium risk facilities and once a year for facilities with low risk. Currently Oahu is the closest in meeting that recommendation at 190 to 1, with the Big Island at 202 to 1, Maui at 222 to 1 and Kauai at 242 to 1. Since the Sanitation Branch has not reached the ideal ratio of 150 to 1, some food establishments may not be inspected at the ideal frequency. It should also be noted that the Sanitarians do not only conduct food safety inspections but are also responsible for a myriad of other regulatory responsibilities such as swimming pools, tattoo shops, barber and beauty parlors, embalmers, etc., which further exacerbates the sanitarians' workload.

Passage of Act 176 allowed the Sanitation Branch to increase the cap on the Sanitation and Environmental Health Special Fund from \$330,000 to \$1.5 million. The Sanitation Branch secured a vendor [Paragon Bermuda (Canada) Inc.] to create a comprehensive web-based food establishment inspection system, which first went "live" in September 2012. New tablet PC's were also purchased for each inspector to record all data collected during an inspection. The initial electronic web-based inspection system was completely paperless. It handled the permit fee billing functions, promoted greater consistency in inspections, provided perfectly legible reports and captured electronic signatures with electronic storage of all reports and attachments, and was to provide complete transparency by giving public access to our inspection results. However, over time, the performance of the Paragon system deteriorated as staff had difficulty generating reports in the field due to difficulty bringing up the system in the off-line mode. Synching of daily inspection reports into the mainframe also took longer and longer which resulted in staff idling in the office waiting for the system to update itself. In January 2015 the contract with Paragon was terminated due to poor performance and the vendor's inability to address these issues.

The program issued an RFQ in early 2015 and awarded the contract to Digital Health Department Inc. (DHD) in late June 2015. The Oahu food safety program went "live" with the

DHD system in April 2016 which included the public portal by which the public can access food safety inspection reports from any hand held smart phone, iPad, or computer device. The program also leverages the use of technology (secured wi-fi hot spots), to post the inspections in real time on the public web site. The department is currently working with the DHD to roll the system out on the neighbor isles. Hawaii Island should be “live” by the end of 2017, followed by Kauai and Maui in early 2018.

### FEES COLLECTED

Under Section 321-11.5, HRS, the Department collects fees for permits, licenses, inspections, various certificates, variances, investigations and reviews. These fees are deposited into the Sanitation and Environmental Health Special Fund under Section 321-27(a), HRS that supports training for staff in the Environmental Health Services Division and food establishment personnel; as well as provides educational outreach to the public regarding food safety. Revenues from fees were increased in 2014 with the repeal of HAR 11-12, Food Establishment Sanitation and adoption of HAR, 11-50, Food Safety Code. Fees collected for FY 14 totaled \$772,016. Fee increases which became effective just before FY 15 increased revenue collected to \$1.67 million and then to \$2.14 million in FY 16. In FY 17, revenues reached \$3.7 million and is expected to stay at that level since the full implementation of fee increases and the change from biennial to annual permit fees have occurred. The last of the biennial fees occurred in 2016 and FY 17 saw the full impact of the permit fee increases which began in FY 15. The fee increases since 2014 have placed the program on solid financial ground with a dedicated revenue source that is unaffected by local or national economic conditions. Section 321-27(c), HRS, specifies that any amount in the excess of \$1,500,000 on June 30 of each year shall be deposited into the general fund.

### NUMBER AND RESULTS OF SANITATION & FOOD AND DRUG BRANCH FOOD FACILITY INSPECTIONS

The Sanitation Branch currently permits 10,147 food establishments statewide. This past fiscal year the branch conducted over 12,000 food establishment inspections statewide which included routine and follow-up inspections and identified over 6,000 violations. Of the 12,000 food establishment inspections, 1,354 of these inspections pertained to complaints, of which 268 were food-borne illness complaints.

In FY 15, the program kicked off the new color-coded placarding program and 6421 (79%) Green PASS placards and 1672 (21%) Yellow CONDITIONAL PASS placards were issued during routine inspections.

In FY 16, this improved significantly to 7540 (84.2%) Green PASS placards, and 1270 (15.8%) yellow, CONDITIONAL PASS placards.

The last quarter of FY 17 showed another significant reduction in critical violations as 5324 (85.6%) Green PASS and 892 (14.3%) yellow, CONDITIONAL PASS placard were issued.

The significant reduction in the number of Yellow placards issued is a direct result of the placarding program and the public posting of food inspection results. The paradigm shift in using governmental transparency to influence behavior in the food industry has been a very positive step forward and is changing the way industry looks at food safety.

## CHALLENGES AND STRATEGIES FOR FOOD SAFETY

In February 2014, the Sanitation Branch repealed Hawaii Administrative Rules (HAR) Title 11, Chapter 12, Food Establishment Sanitation and established new rules as HAR Title 11, Chapter 50, Food Safety Code. The new rule was signed into law by Governor Abercrombie on February 24, 2014. This new rule provides the bedrock of the future for the food safety program. It is a complete paradigm shift in the way we regulate the food industry. The industry now recognizes that it must educate and practice active managerial control to reduce or eliminate the occurrence of food illness risk factors (major violations) in their industry PRIOR to the Department's regulatory inspections. Correction of these violations are now done rapidly with little need for formal legal enforcement due to the restaurant placarding system that the new rule authorizes.

The PASS (Green), CONDITIONAL PASS (Yellow), and CLOSED (Red) grading system provides social and economic pressure to strive for nothing less than a Green placard which allows for the occurrence of one major violation if it can be corrected at the time of the inspection. A Yellow placard is issued if there are two or more major violations, and remains in full view of the public until all major violations are corrected. The Food Industry in Hawaii (represented by Hawaii Restaurant Association, Hawaii Food Industry Association, Hawaii Food Manufacturers Association, and the Hawaii Hotel and Lodging Association) deserve much credit in recognizing the public health significance and importance of the new food rules and the placarding system to keep everyone in the industry at a world class level of food safety practices. The new rules are based on the most current scientific and technologically advanced thought on food safety in the United States. The rule is based primarily on the most current FDA Model Food Code, and Hawaii is now among the majority of states that have adopted this version of the FDA Model Food Code.

The rule change also allowed the department to maximize the effect of Act 176 by raising the existing food establishment permit fees from an average of \$46 annually to approximately \$200 annually. The fee increases were projected to increase revenues above \$2.0 million annually from the \$733,000 annually in FY 2014 and to \$1.67 million in FY 2015. In FY 16, over \$2.1 million in revenue was generated. The increase in revenues has funded additional staff to inspect food establishments at a frequency that has been proven to yield more consistent compliance with food safety regulations. These regulations are designed to eliminate food borne illness risk factors which the CDC and the FDA have identified as the causes of food borne illnesses.

The department amended Chapter 11-50 in September 2017 with three major goals:

- 1) Codify the Homemade Food industry to allow non-potentially hazardous foods to be prepared in home kitchens and sold directly to the consumer;
- 2) Clarify food establishment permit exemptions to continue to allow residential child and adult care facilities to serve limited menus from home kitchens (holding these residential facilities to commercial food construction standards would severely restrict the ability of these needed home operators to serve meals with the proper USDA established nutritional requirements for children);
- 3) Require Mandatory food safety education of food establishment permit holders.

The food safety staff provides extensive food safety education during inspections. Mandatory food safety education was not required to operate a food establishment in the State of Hawaii, prior to adoption of HAR Chapter 50 (as amended September 2017), as a result, most restaurant operators would rely solely on the education provided by the direct contact and interaction with our field inspectors during routine inspections. The Sanitation Branch considers the initial inspection of a new food establishment critical in educating the owners and managers on the importance of complying with the administrative rules, by eliminating or preventing major food-borne illness risk factors to keep the people of Hawaii healthy. The food safety program will begin enforcing the required food safety certification in September 2018, one year from adoption.

Maintaining an educated industry in food safety is a huge challenge. When compared with other industries in Hawaii, the food industry has one of the highest turnovers of employees in the state. Additionally, most positions in a food establishment (owner, general manager, chef, food prep workers, dishwashers, etc.) will change on the average every two years, thus negating any food safety knowledge or reinforcement of the rules during that period by the Department of Health. New rules adopted in September of 2017 now requires mandatory food safety education for food establishments statewide. This is the final piece of food safety infrastructure that will help to further reduce the occurrence of food illness risk factors in food establishments. The new rule will require at least one Person-in-Charge to have proof of formal food safety education to be on site at the food establishment while open for business or while employees are preparing food. Peer reviewed studies have shown that having a manager formally educated in food safety results in less food illness risk factors present during routine inspections.

The statewide Sanitation program has sought and achieved tremendous internal improvements in the past six years. The program has gone from having no standards of inspection, no program quality control, and the lack of consistent field inspections, enforcement and education; to having a fully standardized staff with explicit, consistent and documented protocols in all areas. It has achieved a uniform statewide food safety education program, and there is statewide participation in the FDA Voluntary National Retail Food Program Standards (VNRFPS) program. The Big Island staff have each met 2 of the 9 “Gold” standards, and the Oahu program has met 3 of the 9 “Gold” standards. The goal is to have the food safety program under continuous quality improvement and to strive to meet at least 6 of the 9 “Gold Standards” for food safety inspection programs. Achieving that milestone will place us in the upper 10% of

all 600+ food regulatory programs nationwide and make us a “world class” food regulatory program.

The Sanitation Branch has also increased the use of language neutral handouts on hand washing and temperature controls (both are major contributors to food borne illnesses). We have also provided thermometers and sanitizer concentration test strips to new and existing food establishments as part of our routine inspections and have demonstrated how to properly calibrate and use them.

The Branch is focusing on reducing major violations (food illness risk factors) at food establishments during routine inspections. This follows the best practices used in numerous jurisdictions across the United States. In FY 15 the rate of uncorrected food borne illness risk factors that require follow-up inspections was at 21% (Yellow - CONDITIONAL PASS). In FY16 this was reduced to 15.8% and then to 14.3 % in FY17. The goal of the food safety program was to reduce the number of Yellow cards issued to 15% after 5 years. This goal has been met 2 years ahead of schedule, and was achieved by accomplishing the following:

- 1) The food regulatory program was able to identify high, medium and low risk food establishments to prioritize inspection frequencies and maximize staff efficiency. The level of risk is based on the complexity and potential risk of the foods served and how they are prepared within the establishment;
- 2) The program standardized the inspections by requiring explicit documentation on all three risk categories of food establishments in order to document the observations of critical operations within the establishment (food borne illness risk factors such as proper food cooking and holding temperatures, personal hygiene practices by employees, cross contamination issues, etc.); and;
- 3) The program inspected high risk establishments at least three times annually, medium risk establishments at least twice a year and low risk establishments annually.

The statewide sanitation program has completed goals #1 and #2 above, along with numerous other program improvements mentioned. Achieving goal #3 has begun and preliminary results have seen a nearly tripling of the food safety staff on Oahu over the past three years from 9 to 29 at present with only 2 more positions to be filled. This will allow the food safety program to increase the food establishment inspection frequency to established levels based on the 3 risk categories and will produce more consistent compliance with food safety regulations. All the above coupled with the placarding and public access to inspections has allowed the food safety program to achieve its goals years ahead of what was projected. Our FY 15 audit report predicted that we would achieve this goal in 3 years.

In 2017, the program will also consider media productions for public health messaging to reduce the high number of food illnesses being acquired in the homes of residents and visitors. Over a thousand food illnesses are reported annually in Hawaii with about 250 or so a year from regulated food establishments. This means the vast majority of food illness in Hawaii are being

acquired in the home. Food safety messaging can be tailored for the every day home meal preparation. This could go a long way in reducing food illnesses acquired at home and at large family gatherings.

Medical Cannabis will also impact the food safety program in the future as the new cannabis industry strives to produce edibles and other non-smoking delivery systems. Other states, notably Colorado, uses the existing food safety programs to regulate this industry.

TRAINING FOR INDUSTRY & PUBLIC

The branch retains its current voluntary educational approach to inform the public of proper food safety practices and motivate food establishment operators toward compliance with applicable standards and regulations. In this regard, it is recognized that compliance with rules, not enforcement per se, is the primary objective of the Sanitation Branch. Wide dissemination of information concerning the technical and scientific basis for the program’s regulatory requirements will contribute to a clearer understanding of the necessity for compliance. Education is always continuous, especially in areas where technology is constantly evolving, as in the case of food science. An informed public with a clear understanding of the public health rationale of program functions and corresponding regulatory requirements is fundamental in assuring that potential environmental health problems are identified and resolved before actual illness, injury or fatality occurs. This educational philosophy has evolved in part due to Hawaii’s high food establishment to sanitarian ratio.

For FY 2017, the Food Safety Consultation and Education Program provided the following:

	FY ‘15	FY ‘16	FY ‘17
Food Certification Workshops	54	51	33
Students Attended	1003	914	756
Students Certified	986	870	704
% Passed	98%	95%	93%
Food Safety Classes	90	55	76
Students Attended	2030	1098	921

Food Certification Workshops are 16-hour (2 days) classes that cover the principles of food safety and protection as it pertains to HAR 11-50 Food Safety Code. A participant that successfully completes the workshop and passes the examination receives a Hawaii Department of Health Food Handler’s Certificate. This workshop is equivalent to education typically required for all food handlers in states and counties that mandate food safety training.

Food Safety Classes are customizable to address specific needs or problems of the requester and range from one or more hours. For example, if a food establishment has a problem with employee hygienic practices, two to three-hour classes concentrating on proper hygienic practices complete with hands on demonstrations and audience participation could be provided. However, no certificates were issued for these classes in the past.

Since the adoption of HAR 11-50 (as amended in September 2017) the department will no longer be conducting the 2-day Food Certification Workshops which are equivalent to the food industries' Food Safety Managers Certification. The Managers Certification is not mandated by Hawaii law and is offered readily through private food industry trainers.

The Food Safety Education program will focus solely on providing industry the mandated Food Handlers Certification training and education starting from January 2018. The food industry and the DOH have been actively partnering to bring this requirement to fruition. The program continues to offer these classes at no cost to industry.

The food safety program is also using technology (Event Brite) that enables industry to easily schedule DOH classes online. This also reduces time and effort to schedule and confirm attendance at these classes. On Oahu the mandated Food Handlers Certificate will be offered four times a week. At 40 persons per class, we will be able to issue up to 640 certificates per month or over 7000 industry employees/year. The mandated classes are also available online by various approved vendors at a nominal cost of approximately \$10, which will enable industry to easily comply and take the mandated training at their leisure.

The Sanitation Branch has expanded its community education outreach program to include participation in public events such as business and job fairs, school health fairs, county and farm fairs. At these events the branch has increased their public presence by distributing food safety informational handouts, hand washing information and program contact information.

With the threat of rising incidences of Noro and other viruses, the branch has concentrated its efforts in hand washing education during food facility inspections. The Sanitation Branch also operates "The Germ City Hand Washing Team". The team consists of sanitarians and other DOH staff that volunteer to go out to schools or community events to conduct "hands on" hand washing demonstrations with students and teachers actively participating in an interactive hand washing class. A non-toxic chemical is used to simulate dirt and bacteria and after a thorough hand wash and drying the hands are subjected to a black light scan to visually show the students the thoroughness of their hand washing efforts. The team has been very successful and has been recognized in 2009 by the National Environmental Health Association (NEHA) which asked for a representative from the branch to give a brief talk about the program at its conference in Atlanta, GA.

Unfortunately, schools requesting these classes has dropped significantly due to other priorities placed on the DOE and makes it difficult for the schools to have Health Fairs or other activities that highlight public health.

#### TRAINING FOR BRANCH PERSONNEL

In addition to on-going workshops conducted by the Food Safety Consultation and Education Program, the following are highlights of personnel training for fiscal year 2017:

- 1) The Program Manager and Section Supervisor Sanitarian V, attended the FDA Pacific Regional Food Seminar in Reno, Nevada on September 20-22, 2016. (\$3060)
- 2) The Shellfish Specialist Sanitarian IV, attended the 70<sup>th</sup> Annual Shellfish Growers Conference in Chelen, Washington on October 12-14, 2016. (\$2754)
- 3) The Program Manager attended the Marijuana Management Symposium in Denver, Colorado on October 27-28, 2016. (\$2386)
- 4) The Milk Specialist, Sanitarian IV, attended the FD 371 Milk Pasteurization Controls and Tests course in Indianapolis, Indiana on March 6-10, 2017 (\$2349)
- 5) The Standards Officer, Sanitarian V, and the Milk Specialist, Sanitarian IV, attended the National Conference on Interstate Milk Shipments in Grand Rapids, Michigan on March 13-17, 2017 (\$5656)
- 6) The Sanitation Branch Program Manager, and Section Supervisor, San V, attended the Association of Food and Drug Officials Conference in Houston, Texas on June 17-21, 2017. (\$6463)

#### COST OF TRAINING BRANCH PERSONNEL

The cost for branch personnel to attend the above training in FY 2017 was \$22,668, FY 2016 \$31,900, and FY 2015 \$20,942.

#### CLOSING REMARKS

Despite continued efforts and progress in improving the overall quality and safety of foods produced in this country, food borne illnesses remain a serious national public health problem. In recent years Hawaii experienced a large Hepatitis A outbreak sickening nearly 300 people. This outbreak was linked to adulterated scallops from the Philippines which were served at a major sushi chain. Hawaii also experienced a salmonella outbreak in which 14 individuals became ill after consuming poke tainted with contaminated seaweed from a large local farmer. These pathogens continue to find its way into our local food supplies and frequently make the local and national news. The CDC has consistently stated that annually food borne illnesses account for nearly 3,000 deaths in the United States and billions of dollars in lost productivity and the cost of medical care for the ill.

All residents and visitors to Hawaii who frequent the more than 10,000 food eateries, markets, and liquor establishments or any other food sales or distribution centers that the Sanitation Branch inspects, and permits are directly affected by our regulatory food safety program. This is the reason that the passage of Act 176/SLH 2010 was critical in improving food safety in the State. The Sanitation Branch is projecting full staffing levels as described earlier to be a reality in a few months, and will allow the Food Safety program to undertake a

major paradigm shift in how we regulate the food industry; in the way we promote food safety; the introduction of regulatory transparency through a public accessible web-site to view inspection reports; the use of a web based system to electronically streamline fee payments of permits, renewals and late renewal notices; and finally allow DOH to use real time electronic data to influence public health outcomes by efficiently and accurately tracking food borne illness risk factors and any other food safety or enforcement trends or issues.

Continuous and constant improvements to the Food Safety Program continue to make the program a leader in applied computer technology and governmental transparency using real-time posting of inspection results on the web, coupled with a high-profile placarding program, and partnerships. This has led to uncontested public hearings with industry support to constantly update, and streamlined food safety regulations using the most current science, and now mandates certified food handlers training.

Continued vigilance in protecting the public from food borne illnesses is a vital function of the Sanitation Branch. Current resources are dedicated toward support of program activities, personnel enhancement, and technology infrastructure advancements. We will continue our efforts to prudently use current resources to protect public health.