

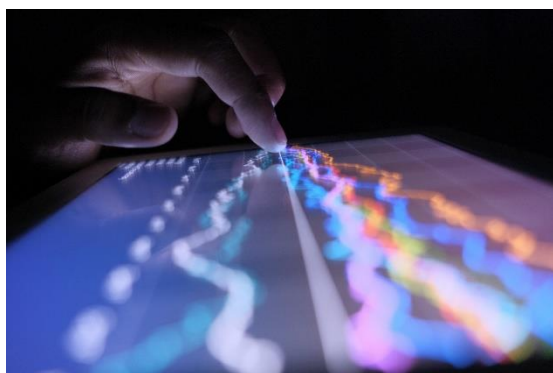
Establishing epidemiology and public health team and the link between epidemiology and laboratory



CONTRIBUTOR: *Francyne Wase-Jacklick, Deputy Secretary, Republic of the Marshall Islands Ministry of Health & Human Services*

CATEGORY: **Epidemiology and Laboratory Capacity (ELC)**

The Republic of the Marshall Islands established an Epidemiology and Surveillance Division and strengthened laboratory capacity. This has improved communicable disease surveillance, established disease prevention activities, and enhanced collaboration between epidemiology and laboratory staff.



The “What”

For a long time, the Republic of the Marshall Islands (RMI) Ministry of Health and Human Services (MOHHS) did not have an Epidemiology and Surveillance Division. Instead, MOHHS would request assistance and support from the Centers for Disease Control and Prevention, World Health Organization, or Pacific Islands Health Officers Association to provide temporary epidemiological services during state of emergencies or outbreaks. Epidemiology services were regarded as a need basis.

The Epidemiology and Laboratory Capacity for the Prevention and Control of Emerging Infectious Diseases (ELC) funding provided the opportunity to build an Epidemiology and Surveillance Division (ESD). Initially, MOHHS hired 4 full-time staff positions. This included a senior epidemiologist, a vaccine-preventable disease coordinator, a surveillance officer, and an ELC program director. With these staff onboard, MOHHS was able to provide services during the hepatitis A outbreak, dengue outbreak, and daily monitoring of syndromic surveillance and reportable diseases. They provide support in improving the Marshall Health Information System (HIS) in the daily monitoring of syndromic surveillance and reportable diseases. ELC funding also supported contract services for RMI National Electronic Disease Surveillance System Base System and release the first RMI Communicable Diseases Surveillance Standard Operating Procedure.



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In the last 4 years, MOHHS has strengthened the partnership between the epidemiology and laboratory teams. Processes were enhanced to ensure strong collaboration and improve case reporting and investigation.

During March 2020, ESD was tasked to lead the development of the RMI Communicable Diseases Response Plan – COVID-19 along with the Preparedness Program. In the same month, RMI closed its borders to control the transmission of novel SARS-CoV-2. ESD staff also supported with seaport surveillance and airport surveillance.

In May 2020, RMI received supplemental ELC COVID-19 funds that helped in strengthening ESD and the 2 Public Health Laboratories located in Majuro and Ebeye. In the last 2 years, MOHHS has increased the staff to support COVID-19 activities. We have hired 3 surveillance specialists (2 in Majuro, 1 in Ebeye), 2 epidemiologists (1 in Majuro and 1 in Ebeye), a monitoring and evaluation officer, 3 laboratory scientists (2 in Majuro and 1 in Ebeye), 4 laboratory support staff (1 admin, 2 lab specialists and 1 lab serologists). We still continue the workforce capacity and development.

MOHHS has expanded the public health laboratories to provide polymerase chain reaction (PCR) testing

capabilities in Majuro and Ebeye. A remote laboratory was established to extend services in the quarantine facility to conduct testing for the incoming and outgoing quarantine patients for more than 2 years. Two (2) Biofire, 2 GeneXpert machines, and COVID-19 test kits and reagents were procured to support the COVID-19 testing needs.

The “So What”

In the last 4 years, MOHHS has strengthened the partnership between the epidemiology and laboratory teams. Processes were enhanced to ensure strong collaboration and improve case reporting and investigation. There continue to be regular meetings between the teams to discuss the activities, inventory of supplies, and training.

With preparedness and capacity in place for COVID-19, MOHHS has been able to establish programs such as the Reopening School Program for the kindergarten to grade 12 schools. This program was later renamed to K-12 COVID-19 screening testing to fit the setting in RMI as there was no community outbreak as of yet. With implementation and training, the laboratory scientists hired in Majuro provided support with training of the teachers on swabbing and testing for over-the-counter COVID-19 Rapid Antigen Test Kits. A COVID-19 testing task force was formed between MOHHS and the Public School System. This platform gave room for discussions on protocols for COVID-19 school reopening and testing. The epidemiologists provided support with guidance in empowering the schools with new COVID-19 protocols and awareness with the parents, teachers association. The same concept was also extended to RMI’s confinement facilities with epidemiology and laboratory support with guidance.

The “Now What”

MOHHS aims to retain the staff hired and continue their development under the ELC cooperative agreement. ELC funding allows MOHHS to expand the workforce by hiring specialists outside of RMI to support those on the island with limited public health experience. MOHHS plans to continue to use funding to strengthen ESD and laboratory capacity and enhance the HIS. MOHHS plans to enhance the HIS so that it is more of an automated system, moving away from totally person-based operations. These will lead to more assurance of continued operations and improved data quality.

Key contributors to this project include Edlen J. Anzures and Jana Matanaicake-Lum On, Republic of the Marshall Islands Ministry of Health & Human Services.