# GUAM CANCER REGISTRY

2021

Annual Report CRC Technical Report 21-01

A Joint Project of the UOG Cancer Research Center and the Guam Department of Public Health & Social Services









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This document provides information at the end of each fiscal year on how the funds provided by PL 30-80 to the Guam Cancer Registry have been used and the progress made in collecting cases and supporting cancer research, education, and outreach on Guam.



#### From left to right:

Maria Snively holding Guam Cancer Facts & Figures 2003-2007, Naomi del Mundo (CTR) holding Guam Cancer Facts and Figures Brochure, Renata Bordallo (MSW, CTR) holding Guam Cancer Facts & Figures 2008-2012, Shirday Nagata (MPA) holding Annual Report 2020, Lymona Refugia (CTR) holding GCR data reporting poster.

### **BACKGROUND**

The Guam Cancer Registry (GCR) is a population-based registry that is tasked with recording all cancer cases occurring among residents of Guam. The Registry had a very humble beginning in 1968 as just one of many collateral duties of the Territorial Epidemiologist. At that time, the main sources of data were death certificates on file at the Office of Vital Statistics, Department of Public Health and Social Services (DPHSS), and records provided by the American Cancer Society-Guam Chapter (ACS-Guam).

The GCR became a unit of the Cancer Research Center of Guam (CRCG) in 2004, a joint venture of the University of Guam (UOG), the Guam DPHSS, and the University of Hawaii Cancer Center (UHCC). With funding provided by the National Cancer Institute (NCI), the GCR was able to hire a full-time data collection specialist. This greatly improved the ability of the GCR to collect more accurate and complete information regarding Guam cancer cases. In recognition of its progress, in 2006 the GCR was awarded full-member status in the North American Association of Central Cancer Registries (NAACCR), of which it remains a member. A second data collection specialist was hired In February 2007. In 2021, the GCR is comprised of five staff who are all full-time research associates trained in cancer case abstraction and case collection (three are Certified Tumor Registrars). Through mentoring by the Hawaii Tumor Registry (HTR), the GCR continues to seek improvement of the accuracy, completeness, and timeliness of its cancer data to meet the exacting standards set by the NAACCR and the National Cancer Institute/Surveillance & Epidemiological End Results (NCI/SEER) research programs. Achievement of these objectives is important because the GCR is a resource cornerstone for health planners and the ongoing effort of the University of Guam to develop excellence in the fields of health education and research.

A condition of continued financial support of the GCR by the NCI is evidence of local support by the Guam community. Passage of Public Law 30-80 by the Guam Legislature which stipulates that the GCR will receive 1% of tobacco tax revenues annually provides evidence of that support. This local support is critical to the sustainability of GCR.



The GCR continues to seek improved data collection by developing community-based partnerships and data sharing agreements with local and regional area hospitals, physicians, medical clinics, and outpatient treatment centers. Outreach to "mandated reporters" is a continuous challenge as the number of medical and non-medical service providers to cancer patients increase. The inclusion of non-medical service providers - such as non-profits and insurance companies - since DPHSS updated its regulations for GCR in October 2010 (under authority of Public Law 24-198) has increased GCR's ability to collect more complete incident cases of cancers diagnosed among Guam residents.

Tools such as GCR's Outreach Poster, Mandated Reporters Policy & Procedure Manual, confidential online WebPlus reporting capability, and the Cancer Research Center website continue to educate service providers and the general public about the importance and outcomes of reporting to the registry.

GCR regularly participates in the Data & Research Action Team and the Program Steering Committee of the Guam Comprehensive Cancer Control Program (GCCCP), as well as the Non-Communicable Disease (NCD) forums hosted by DPHSS. It strives to be of use to our island community by disseminating information collected about cancer on Guam and other parts of Micronesia (as well as other US-affiliated Pacific Island jurisdictions).

GCR continues to partner with and support community organizations involved in data and surveillance activities in Guam and the Pacific Region as well as concerned citizens such as cancer survivors and their families. In addition to GCCCP, NCD, and Guam Breast and Cervical Cancer Early Detection Program (GBCCEDP) – all organizations under DPHSS's umbrella, GCR works with Pacific Island Health Officers Association (PIHOA), Cancer Council of the Pacific Islands (CCPI), UH-UOG Pacific Island Partnership for Cancer Health Equity (PIPCHE/U54), and Pacific Regional Central Cancer Registry (PRCCR).

Registry staff fielded at least 16 research inquiries during Fiscal Year 2021 and provided cancer data to one UOG undergraduate student researcher, five U54 Grant researchers, two DPHSS personnel, two community non-profit agencies, one former senator, and one medical doctor. Requests for data were for information about Guam's more prevalent cancers – breast, lung, prostate and cervical – as well as mortality rates, cancer and NCDs, tobacco and lung cancer, and cancer in relation to environmental toxins such as radiation fallout from prior US bomb testing in the Pacific.

#### **ACTIVITIES**

The following is a Summary Report of GCR activities funded with tobacco tax monies during the recent budget cycle – Fiscal Year 2021. This report covers the time-period from October 1, 2020, to September 30, 2021.



☐ Hired two new employees in Feb 2021, Maria Snively and Shirday Nagata.
☐ GCR staff attended trainings with Hawaii Tumor Registry (HTR) staff and all Pacific Island Jurisdiction (PIJ) registrars focusing on common abstracting errors and upcoming updates for cases diagnosed in 2021.
☐ M. Snively and S. Nagata attended National Cancer Registrars' Association (NCRA) Fundamentals of Abstracting workshop. This workshop provided a comprehensive and thorough review of important topics such as: ICD-O topography & histology and Solid tumor Rules (STM), American Joint Committee on Cancer Tumor, Nodes, Metastasis 8th Edition (AJCC TNM) Staging, Summary Stage 2018, etc.
☐ All employees attended the NCRA's Virtual Education Conference from June 4-6 and the Annual (NAACCR) conference from June 16-18. These conferences provided educational session to showcase critical cancer registry topics and help registrars stay current.
□ N. del Mundo attended the following online workshops: NCRA's SEER Advanced Topics Workshop and CDC-NPCR (National Program of Cancer Registries) ETC (Education and Training Coordinator) Virtual Workshop. The SEER Advanced Topics workshop focused on expanding registrars' knowledge on histology coding rules, new data items, advanced pathology concepts, etc. The ETC workshop focused on challenges and solutions with data quality and quality control & education.
☐ L. Refugia attended the NCRA CTR (Certified Tumor Registrar) Open Book Prep Workshop and NAACCR CTR Exam Prep and Review Webinars to prepare for the CTR exam.
☐ L. Refugia successfully passed the National CTR exam and is now a CTR.
☐ Cancer registry training is frequent and ongoing due to annual changes in coding and abstracting principles set by national registry standard setters. They prepare registry staff to become CTRs and offer educational credits to maintain CTR status.



Active Case Collection is the active pursuit of cancer case documents located in hospitals, laboratories, and surgical/medical clinics for purposes of abstracting. Passive case collection occurs when mandated cancer case reporters submit cancer case documents or cancer patient listings for a specific time-period. GCR acts as both a hospital registry (abstracting cases they diagnose and treat) and a central registry (collecting, consolidating, and editing already abstracted cancer cases).

☐ For Fiscal Year 2021, GCR exceeded their annual average submission number of 350 cases and submitted 423 cases (or 121%) to the Centers for Disease Control and Prevention (CDC).
☐ GCR staff continued formal outreach to Guam Regional Medical City (GRMC), educated staff in cancer reporting processes, and scheduled time for active case collection for October 2021.
$\hfill \square$ GCR staff started conducting formal outreach to resume active case collection with FHP Health Center and Oncology Clinic.
☐ GCR staff continued to receive monthly death certificates from DPHSS-Office of Vital Statistics and complete "death clearance" (resolve vital status) for abstracts.
□ For this Fiscal Year, GCR received Patient Listings from the following: Guam Memorial Hospital Authority (GMHA) Pathology Lab, GRMC Oncology department, GRMC Pathology department, Cancer Center of Guam (CCG), Island Cancer Center (ICC), Guam Seventh Day Adventist Clinic (SDA), DPHSS GBCCEDP, Guam Surgicenter LLC, EM Calvo Cancer Foundation, and Texas Central Registry.
☐ For this Fiscal Year, GCR conducted active case collection at the following: CCG and ICC.
☐ For this Fiscal Year, GCR received cancer cases from the following: California Central Registry, Texas Central Registry, Guam SurgiCenter LLC, Marianas Physicians Group, DPHSS-VS, Guam SDA clinic, Guam BCCEDP, Pacific Daily News Obituaries, GMHA Pathology Lab, GMH Medical Records Dept., Guam ENT Clinic, MDX Imaging Center, and GRMC Pathology Lab.



In the past year, we purchased new equipment for our expanding workplace such as:

- Desktop computers for new employees.
- Standing desks and chairs for all employees for ergonomic support.
- Laptops for our new employees when active off-site case collection is needed.
- Updated contract for Xerox machine
- New encrypted hard drives and thumb drives for backup of files and added security.



GCR staff continue to work with PIJ registrars on case collection, identifying abstracts that belong to their jurisdictions, and collaborative training. Partially abstracted PIJ cases (non-Guam residents) with Date of Diagnoses 2007 to 2019 were identified, completed, and exported to PRCCR. Majority were Commonwealth of the Northern Marianas (CNMI) cases. GCR regularly scans non-resident cancer cases and documents exchange of cases with Transmittal Letters to CNMI and Federated States of Micronesia (FSM). PIJ cases are also transmitted to the proper registries using WebPlus secure online transmission.



Although COVID-19 did not affect GCR's staff to complete abstracts, it hindered in case collection. We are working diligently with our partners in creating a safe process for case collection using WebPlus (secure online transmission), communication through Zoom and virtual platforms, and following COVID safety procedures when visiting facilities if needed.

# **CONCLUSION**

It is a goal of the University of Guam to become a center of outreach, learning and research about cancer and cancer health disparities in our region. The continued support of the Guam Legislature and the Governor of Guam in achieving this goal is greatly appreciated by the University and will undoubtedly be of great future benefit to the people of our island as well as our island neighbors.

Please access our website – www.u54.guamcrc.org/gcr/ – for more detailed information about cancer health disparities research and research findings, as well as our publications. Also please see Addendum A for a table on recent Guam cancer data.

With appreciation and thanks to Dr. Rachael Leon Guerrero, Dr. Pamela Peralta Taitano, Renata Bordallo, Naomi del Mundo, Lymona Refugia, Maria Snively, and Shirday Nagata.

# **ADDENDUM A - RECENT GUAM CANCER DATA**

#### **TOP 10 CANCERS FOR GUAM 2007-2018**

	TOP 10 CANCERS FOR GUAM 2007-2018	CASES	CRUDE	US STD	WORLD STD	INCIDENCE RATE US*	% DEAD WITHIN 5YRS OF DIAGNOSIS	% DIAGNOSED STAGE 1	% DIAGNOSED STAGE 3 OR HIGHER
	All Sites	3884	318.5	289.7	215.7	449.0	36%	24%	<b>73</b> %
8	Lungs & Bronchus	657	53.9	52.6	37.7	60.2	70%	9%	90%
X	Breast	603	100.8	82.1	64	124.70	9%	35%	63%
8	Prostate	466	75.0	84.6	57.9	109.5	12%	50%	49%
8	Colon & Rectum	433	35.5	32.7	24.1	39.2	30%	18%	76%
8	Liver	190	15.6	12.6	10.1	8.1	77%	11%	86%
X	Uterus	172	28.7	22.3	18.1	26.2	12%	35%	58%
8	Thyroid	145	11.9	8.7	7.6	14.5	8%	35%	62%
8	Leukemia	133	10.9	11.5	7.8	14.0	35%	0%	100%
8	Stomach	91	7.5	7.3	5.2	7.0	53%	9%	91%
8	Cervical, invasive	86	14.4	10.4	8.9	7.5	27%	22%	70%
2	Nasopharynx	79	6.5	5.0	4.1	0.5	32%	5%	94%

Source: Pacific Regional Central Cancer Registry (PRCCR), 2007-2018; 3844 total cancer cases for age over 20 and 15 childhood leukemia, 2 child Brain (1y,4 y), 2 Bones & Joints, 1 child breast (14y), 2 child colon & rectum (17y), 1 eye & orbit (2 yr), 1 Hodgkin disease(7), 1 child ill defined, 3 Kidney & Renal Pelvis, 2 child nonhodgkin lymphoma, 2 child other digestive, 1 liver(1yr), 1 Other Endocrine(17y), 1 other male genital, 1 other respiratory, 1 ovary, 1 peripheral nerves, 1 small intestine, 1 Soft Tissue, 1 testis, 1 thyroid, 1 urinary bladder; Breast cancer rate is based on female population only. 2 Male breast cancer case(s) reported \* U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on November 2017 submission data (1999-2015): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; www.cdc.gov/cancer/dataviz, June 2018

## PARTNER ACKNOWLEDGMENT

The UOG Guam Cancer Registry would like to acknowledge the following partners who contributed cancer data to make the FY 2021 report possible:

- Cancer Center of Guam (CCG)
- Edward M. Calvo Cancer Foundation
- Guam DPHSS Breast and Cervical Cancer Early Detection Program
- Guam DPHSS Office of Vital Statistics
- Guam ENT Clinic
- Guam Memorial Hospital Authority (GMHA) Pathology Lab
- GMH Medical Records Department
- Guam Regional Medical City (GRMC) Oncology Department
- Guam Regional Medical City (GRMC) Pathology Department
- Guam Seventh Day Adventist Clinic (SDA)
- Guam Surgicenter LLC
- Island Cancer Center (ICC)
- Marianas Physicians Group
- MDX Imaging Center
- Pacific Daily News Obituaries

and Interstate data exchange: Texas Central Registry and California Central Registry



























