PROCUREMENT AND SUPPLY

COMMONWEALTH HEALTHCARE CORPORATION

REQUEST FOR PROPOSAL (RFP)

POPULATION HEALTH SERVICES
RFP23-CHCC/PHS-001

SUBMISSION DEADLINE: NOV 18th, 2022 TIME: 10:00AM (CHST)

"COMMUNITY HEALTH ASSESSMENT (CHA), COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) AND POPULATION HEALTH SERVICES (PHS) STRATEGIC PLANNING"

INTERESTED PARTIES CAN DOWNLOAD THIS REQUEST FOR PROPOSAL FROM THE CHCC WEBSITE [WWW.CHCC.HEALTH]. ONCE AT THE SITE, NAVIGATE TO **REQUEST FOR PROPOSALS** TAB ON THE LEFT NAVIGATION BAR. CLICK ON THE URL FOR THIS RFP. YOU WILL BE REQUIRED TO ENTER DATA TO ALLOW US TO TRACK ALL REQUESTS FOR THIS OPPORTUNITY.

THE CHCC RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSAL AND TO WAIVE ANY IMPERFECTIONS IN ANY PROPOSAL, IF TO DO SO SHALL BE IN THE INTEREST OF THE CHCC. ALL PROPOSALS SHALL BECOME THE EXCLUSIVE PROPERTY OF THE COMMONWEALTH HEALTHCARE CORPORATION.

/S/ ESTHER L. MUNA
CHCC CHIEF EXECUTIVE OFFICER

/S/ CORA P. ADA
DIRECTOR OF PROCUREMENT & SUPPLY

Commonwealth Healthcare Corporation
Commonwealth of the Northern Mariana Islands
1178 Hinemlu' Street, Garapan, Saipan, MP 96950

REQUEST FOR PROPOSAL (RFP)

RFP23-CHCC/PHS-01

"COMMUNITY HEALTH ASSESSMENT (CHA), COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP) AND POPULATION HEALTH SERVICES (PHS) STRATEGIC PLANNING"

I. BACKGROUND INFORMATION

The CHCC is seeking assessment and evaluation services to complete a 2022 Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) aimed to identify and describe the health of the CNMI community and to develop a plan to address the community health needs or priorities. Programs under CHCC Population Health Services (PHS) are part of the larger CHCC organization and work to improve the health and well-being of the CNMI population through the delivery of core public health function that include: assessment, policy development, and assurance. Part of this work will require the development of the mission and vision for the CHCC PHS unit and a strategic plan for the PHS section that contributes to the overall CHIP and CHCC organizational mission.

II. NATURE OF WORK

In accordance with the terms and conditions of the Indefinite Delivery/Indefinite Quantity (IDIQ) Concept, the Contractor shall perform the work of this task order for the Commonwealth Healthcare Corporation (CHCC) and will work closely with the CHCC Population Health unit leaders and CHA/CHIP Steering Committee.

III. LOCATION OF WORK

Commonwealth Healthcare Corporation
1 Lower Navy Hill, Navy Hill
Saipan, MP 96950

IV. DETAILED SCOPE OF WORK

The general scope of work for the CHA and CHIP project will include the following:

1) The collection and analysis of primary (qualitative) data from community stakeholders and required subpopulations.

2) The collection and synthesis of secondary (quantitative) data using publicly available data sources.
3) The facilitation of a clear process to identify and prioritize significant health needs facing the CNMI.
4) The preparation of a comprehensive written CHA Report, with island specific assessments for Saipan, Tinian, and Rota.
5) The preparation of a CHIP to address the health priorities identified in the CHA to include specific goals, objectives, strategies, performance measures, and evaluation plan for monitoring progress towards achieving outcomes identified in the CHIP.

The CHCC would like the consultant to build upon and update its previous CHA report to serve as the foundational CHA report for 2022, including the solicitation and consideration of input from persons representing the broad interests of the community. **(Please see attached Exhibit A)**

Specific Tasks:

The consultant's scope of work shall include the following:

1) Meet regularly with the Steering Committee throughout the process. The Steering Committee will be selected by the CHCC and will include representatives from the population/ public health programs, outpatient clinics, hospital, community organizations, government agencies and other key stakeholders. The steering committee will be called upon for guidance, advice, expertise, stakeholder perspectives, and assistance in making community connections throughout the process.
2) Conduct a literature review including a review of:
    a. The most recent CNMI CHA and CHIP to build upon and maintain continuity with past efforts.
    b. CHAs from other regions in the country performed at a hospital, health system, county, and/or state level to identify any best practices or approaches that would be appropriate to incorporate in our CHNA. Limit review to 3-5 CHNAs, including relevant CHAs from Hawaii, Alaska, and other regions located on the west coast.
3) Update and augment the community health data from the recent CHA report. Account for the impacts of COVID-19 in the data and include additional data points as appropriate.
4) Solicit and take into account input received from community stakeholders and sub-populations. The consultant will determine the sequence and timeline for primary data collection and identify what qualitative data will be analyzed and summarized. The consultant will work with the steering committee to determine focus groups and other qualitative data collection activities will be conducted to inform the CHA. The consultant will conduct qualitative data collection, as needed, to inform the CHA and CHIP.
5) Facilitate the prioritization of significant health needs facing the community that builds upon the previously determined priorities and incorporates new input.
6) Synthesize data and new inputs, updating the most recent CHA into a written CHA report for 2022. This foundational report will be representative of the entire CNMI territory, with island specific sub-assessments for Rota and Tinian.

a. The CHCC plans to widely disseminate the report and share it with the community and organizations beyond the health care industry, including but not limited to education, government, housing, and food sources. As such, the audience for the report will be much broader and serve as a basis for collaboration with other organizations and stakeholders to address the health needs of our communities.
b. The report shall meet electronic document accessibility standards set forth by Section 508 of the Rehabilitation Act and guidelines published by HHS. The report shall be provided in PDF and Word formats.

7) The preparation of a CHIP to address the health priorities identified in the CHA to include specific goals, objectives, strategies, performance measures, and evaluation plan for monitoring progress towards achieving outcomes identified in the CHIP.
8) Provide regular status reports to the CHA project manager or designee. Frequency shall be the middle and end of each month.
9) Provide support and coordination with the CHCC in conducting a stakeholder presentation of the key findings of the CHA and in presenting the CHIP for addressing CNMI health needs.

1. **Deliverables**

Please refer to "Specific Tasks" for detailed description on deliverables.
At the completion of the project, the consultant will produce Word and PDF formatted documents of the following:
- Community Health Assessment
- Community Health Improvement Plan

2. **Task Period and Deliverable Schedule**

Major Tasks	Target Completion Date
RFP Due	November 14, 2022
Evaluation of Proposal/Selection of Contractor	November 18, 2022
Issuance of Notice to Proceed (NTP) Letter	December 1, 2022
Consultant Performs Work	December 5, 2022
Final Reports/Documents and Presentation to Stakeholders	**April 01, 2023**

3. **CHCC Government Furnished Information**
   a. The contractor will continue to collaborate with the CHCC Public Health Programs team for information needed to complete the tasks and deliverables under the scope of work, including: data reports, surveillance and assessment reports, previous CHA and CHIP reports, etc.
4. **Line Items to consider**
   a. Proposers are requested to include sample products of similar or other related work deliverables as part of the task order response.

V. INFORMATION AND FORMAT REQUIRED IN THE PROPOSAL

All proposals submitted by the prospective vendors must contain the following information:

1. Brief history and description of the company (including the date the company was founded and date of operation in the CNMI).
2. Statement of the company's capabilities and experience.
3. Overall service/work plan and approach to project, including estimated timeline for completion and itemized costs.
4. Proposed fee for the scope of work (refer to Section III)
5. List of a minimum of three (3) references (arrange references from most receipt projects).
6. Listing of Board of Directors or Officer, if applicable, and number of employees in the last three (3) years.
7. The name of the authorized personnel to negotiate the proposal and contract (should also be the contact personnel).
8. Copy of valid CNMI Business License and W-9; For Off Island Vendors – Valid Business License plus W-9
9. Proof of insurance coverage for the contractor and property liability insurance in at least $100,000.00.
10. Other information that may be helpful to the evaluation team.

CHCC reserves the right to request for additional information or documents that it may consider necessary and relevant to assist it in evaluating a proposal.

VI. GENERAL AND ADMINISTRATIVE INFORMATION

a. Submission of Proposal

Interested parties can download this Request for Proposal (RFP) from the CHCC Website [www.chcc.health]. Once at the site, navigate to the RFP tab on the left navigation bar. Click on the URL for this You will be required to enter the date to allow us to track all requests for this opportunity.

b. General Provision

Until the selection process is completed, the content of the proposal will be held in strictest confidence and no details of any proposal will be discussed outside the Evaluation Team created by the Corporation. This RFP does not constitute an offer and does not obligate the Corporation in any way. The Corporation reserves the right to reject any or all proposals for any reason and waive any

defect in said proposals, negotiate with any qualified offers, or cancel in part or its entirety this RFP, if it is in the best interest of the Corporation.

CHCC will enter a contract(s) with the successful vendor pursuant to the terms of the standard government independent contract. Additional terms and conditions will be attached as exhibits to the standard independent contract.

c. Place, Date, and Time of Submission

Please email your proposals and all supporting documents to Corazon P. Ada, Director, CHCC Division of Procurement and Supply, at **chcc.procurement@gmail.com,** no later than **10:00AM November 18, 2022 Chamorro Standard Time (CHST).**

Proposers may opt to submit (4) hard copies in addition to the original proposal (5 in total) to the CHCC Division of Procurement and Supply, Main Office Garapan Saipan.

Please note submission instructions:

- All submissions must include the RFP/ITB # and Project Title in the email subject.
- All documents must be submitted in Adobe PDF Format.
- All pages of your proposal must include the RFP/ITB # and Project Title in the header, plus page number in the footer.

Failure to follow these instructions will be considered unresponsive and your proposal will not be included for technical evaluation.

d. Cost of Preparation

All costs incurred by the vendor in preparing a response to this RFP/ITB and subsequent inquiries shall be borne by the vendor. All proposals and accompanying documentation will become the property of CHCC and will not be returned. The Commonwealth Healthcare Corporation reserves the right to reject any or all bids for any reason and to waive any defects in said bid, if in its sole opinion, to do so would be in the best interest of CHCC.

e. Questions, clarifications, or inquiries

All questions or requests for clarification must be made in writing through email.

All emails **MUST** contain the RFP/ITB # and Project Title in the email subject.

Submit questions:

- Heather Pangelinan
  Director, Public Health Services
  Email Add: heather.pangelinan@chcc.health
  Tel No. 670-236-8703

Or

- Corazon P. Ada
  Director, CHCC Division of Procurement & Medical Supply Office
  Email Add: cora.ada@chcc.health
  Tel No. 670-234-8950 ext 3561

VII. EVALUATION CRITERIA

Award will be made to the proposer whose proposal is most advantageous to the Corporation considering the evaluation factors set forth below.

a. Technical Criteria

1.	Qualification	20
2.	Experience	30
3.	Project Approach	30
4.	Cost	20
TOTAL POINTS		**100 Points**

b. Cost Criteria

Price is also a factor for consideration and price will be evaluated in comparison with the overall merit of the proposals. Technical merit is more important than price and the Corporation reserves the right to award the contract other than the lowest priced proposal. As proposals become more equal in technical merit, the importance of price will increase.

VIII. SUCCESSFUL VENDOR NOTIFICATION PROCESS

Upon the selection, the successful service provider will be advised to negotiate the contract with CHCC. Should the negotiations fail to result in an agreement, CHCC reserves the right to cancel the negotiations and select the next recommended service provider, which in CHCC's opinion, is the most qualified proposer. If the contract is not agreed to with any of the proposers, the RFP/ITB will be cancelled and re-advertised.

Approved By: _____ Date: 10/13/22

Esther L. Muna, PhD, MHA, FACHE
Chief Executive Officer

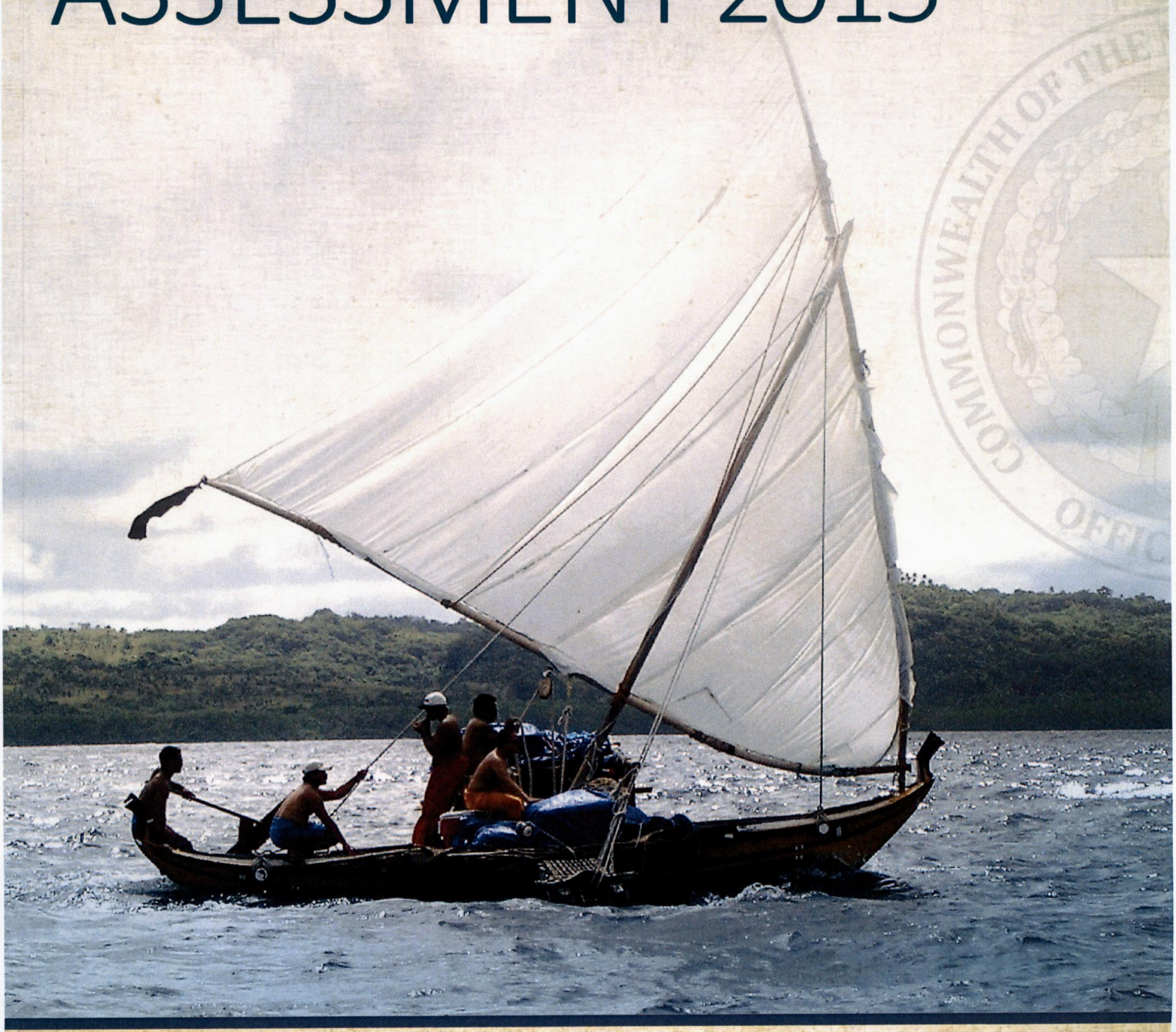
Approved By: _____ Date: 10/13/22

Corazon P. Ada
Director of Procurement & Supply

"EXHIBITA"

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

COMMUNITY HEALTH ASSESSMENT 2015



Commonwealth Healthcare Corporation • Commonwealth of the Northern Mariana Islands

Prepared by

REDSTAR INNOVATIONS

individuals and departments have contributed to the development of this
t including Commonwealth Health Care Corporation leadership, managers
taff who supported the process, the Bureau of Environmental and Coastal
ty, Breast and Cervical Screening Program, Immunization Program, Crimi-
stice Planning Agency, Division of Youth Service Child Protection Unit, and
tment of Public Safety who provided data, and community health partners
provided input and context for the health issues of concern to all Islanders.
e grateful for the efforts of the following individuals on the planning team.

nunity Health Assessment Core Planning Team

Aguon, Community Guidance Center
Ajoste, Hospital
Cabrera, Information Technology
Cabrera, Kagman Community Health Center
o Celis, Public Health; Women, Infants, and Children Program
Kabua, Public Health; Maternal & Child Health Bureau
ny M. Reyes, Director of Information Technology
Moreno, Public Health; HIV – STD Resource and Treatment Center
a Palacios, Corporate Quality Performance Management
Robles, Public Health; Non Communicable Disease Bureau
rt Rospel, Public Health; Health & Vital Statistics Office
y Sasamoto, Immunization Program
antos, Public Health; Maternal & Child Health Bureau
ongsong, Immunization Program
Zandueta, Administrative Officer/ Accreditation Readiness Coordinator

nonwealth Health Care Corporation

nonwealth of the Northern Mariana Islands
er Navy Hill Road Navy Hill
n, MP 96950

uestions and comments about this report, please contact:

a Palacios
Health Quality Coordinator
rate Quality & Performance Management
: hspalacios06@gmail.com

Commonwealth Healthcare Co
Commonwealth of the Northern Marian
l Lower Navy Hill Road Navy Hill, Saipan, MP

November 27, 2015

Hafa Adai and Tirow!

The Commonwealth Healthcare Corporation (CHCC) is one of the
in the CNMI, serving as the umbrella for the lone Hospital, Divisio
and Community Guidance Center. In 2014, DPH began the journey
Community Health Assessment (CHA). During the process CHCC
community stakeholders on the prioritization of health concerns in

The CHA is a collaborative process of thoroughly collecting releva
community. The assessment provides a health profile that includes
behaviors, morbidity, mortality, and other areas that help define th

The 2015 CNMI CHA will provide a better understanding on the h
issues in our community. This document will serve as the mapping
Community Health Improvement Plan (CHIP), analyzing our data
challenges that need to be addressed as we work towards improvin
complete 2015 CHA is available on the CHCC website, under the

Esther L. Muna
Chief Executive Officer

Margari
Director

NORTHERN MARIANA ISLANDS

The Commonwealth of Northern Mariana Islands (CNMI) is a chain of 14 volcanic islands along the Mariana Archipelago situated in the Western Pacific. With a population of nearly 54,000, the vast majority of people live on three islands: Saipan, Tinian and Rota. The other islands have much smaller populations or are uninhabited. The northern islands are volcanic, with active volcanoes on several islands, while the southern islands are limestone, with level terraces and fringing coral reefs. The climate on CNMI remains fairly constant throughout the year, with seasonal northeast trade winds. The rainy season runs from July to November and can include typhoons. Typhoon Soudelor devastated Saipan in August of this year, placing our communities on Saipan into a state of emergency – many without running water or electricity.

As a commonwealth, CNMI is self-governing locally elected governor, lieutenant governor, and bicameral legislature. The CNMI government is structured similar to states, in that it has a central government with executive power exercised by the Governor and Lieutenant Governor, two legislative bodies (a House of Representatives and a Senate) and an independent judiciary, which is the Supreme Court of CNMI. Capitol Hill, located in northwestern Saipan, is the administrative center and seat of the CNMI government.

Chamorros are the original inhabitants of the islands and were later joined by the Carolinians in the 19th century. Chamorros and Carolinians are considered indigenous and both languages are official in the Commonwealth, as is English. Our population on CNMI is quite diverse due to our colonial history with Spain, Germany, and Japan, as well as the United States. CNMI has also experienced an influx of migrants from neighboring islands and parts of Asia, as well as an expanded military presence in recent years.

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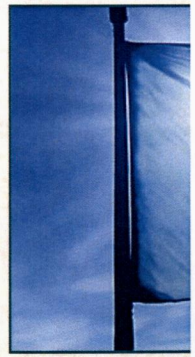


The CHCC serv
of Hospital Se
vices, three h
Health Center
and the Dr. Jo
Division of Hos
Health Center
that provides
but not limite
nursery, adult
nursing, physi

vell-being for the people of the CNMI through health promotion, ntion of diseases in close partnership with the community."
f Public Health Services Mission Statement

ices (DPHS) is r twenty (20) ver 100 staff der to improve vealth, the Di- partnerships, health," and

/, accountabil- ve these accreditation. / process that prove quality ss by which a ; performance : from accred- s four key ini- :ture and sys-

of the Division :nerating and

nagement rove health ting. ssurance and systematically erations. better support the burden of NMI.

ie Centers for the National HII).[2] Over the :ed to support

ity—the skills, structures, resources and relationships—needed to deliver the Ten Essential Public Health Services. (See Figure 1) Another key activity that DPHS completed with NPHII[3] funding was this community health assessment (CHA). CHA is a critical public health function and is one of three prerequisites to apply for public health accreditation (along with a Community Health Improvement Plan and an Organizational Strategic Plan).

10 ESSENTIAL PUBLIC HEALTH SERVICES [3]

1. **Monitor health** status to identify and solve community health problems.
2. **Diagnose and investigate** health problems and health hazards in the community.
3. **Inform, educate, and empower** people about health issues.
4. **Mobilize community** partnerships and action to identify and solve health problems.
5. **Develop policies and plans** that support individual and community health efforts.
6. **Enforce laws and regulations** that protect health and ensure safety.
7. **Link people** to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** competent public and personal health care workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.

and systematic collection, analysis and dissemination of information on th to inform priority setting and health improvement planning. According to

> *"A collaborative process of collecting and analyzing data and informatic communities, developing priorities, garnering resources, and planning c health. The development of a population health assessment involves th data and information to provide the health department and the popula decision-making and action."*

CHA typically uses a variety of data sources and methods as a way to tell a ty's health. It provides information about health status, describes factors th challenges, and prioritizes areas of health improvement. This CHA wil Community Health Improvement Plan.

CNMI COMMUNITY HEALTH ASSE

CHCC selected the *Inter Tribal Council of Arizona's Community Health As A Practical Guide and Toolkit* as a model and guide for planning and imp tool was designed for tribal health departments, many of the considera assessment align with the setting and the way health services are struct

DPHS began conducting the CHA in September 2014 by first convening t team responsible for conducting the assessment. Early in the planning, the Association of State and Territorial Health Officials and the National Officials, who traveled to CNMI to facilitate the development of a CHA p ners and CHCC leadership and staff to provide input into the process an the assessment.

The CHA Core Team determined that the overall purpose for conducting comprehensive report of CNMI's health data and statistics to better *una identify health improvement priorities, and develop an action plan that resources, and timeframes.* By providing a centralized source of informa the CNMI, DPHS aims to achieve three major goals:

1. Strengthen coordination among CHCC partners to increase awarene
2. Develop and manage a robust information technology (IT) network, monitor health and improve health outcomes in the CNMI.
3. Use strengths, assets and resources to address health issues that em

ed interest—in improving the health of our community across the
akeholders and CHCC staff identified health topics and then prioritized
These categories emerged as the priority health areas to be explored in

	Tobacco Betel nut Alcohol and Drugs
	Tuberculosis Sexually transmitted infections HIV/AIDS (incidence, behaviors, testing)
	Diabetes Cardiovascular disease Cancer (screening, mortality)
	Flu Pneumonia Viral hepatitis
	Infant and child mortality Bleeding disorders
	Serious emotional disturbance/Serious mental illness
	Child abuse and neglect Domestic violence Suicide

health. The CHA Core Team met with staff and asked them to participate
contributing factors (i.e. risk factors, protective factors, and determinants
assets and resources related to each of the seven priority health areas ab
recurring topics that were identified for many of the health issues:

TABLE 1. Factors contributing to CNMI public health

CONTRIBUTING FACTORS

Risk Factors
- Family history of disease
- Overweight and obese
- Substance use and abuse
- Religious/personal beliefs

Protective Factors
- Good nutrition
- Religious/personal beliefs

SOCIAL DETERMINANTS OF HEALTH
- Education background
- Socioeconomic status (SES) and income
- Community norms on violence
- Perspectives on immunizations
- Transportation

ASSETS AND R
- Federal grant
- Partnerships
- Community
- Community
- Programs un
- Vaccination
- Public health
- Screenings

VULNERABLE
- Low income
- Teenage pare
- Languages sp
- Children with
- Elderly

Using the input from community stakeholders and CHCC staff, the Core Cl
to include in the CHA. The team then developed a plan to review available
and report it. The result of this effort is described in the following section

Data Challenges and Limitations

CHCC recognizes the value of effective Health Information Management a
systems. Currently, CHCC is in the process of upgrading for the CHCC Hosp
Center and DPHS programs and clinics. While the current challenges are b
examined the quality of data and information included in this assessment
representativeness, reliability, accuracy and completeness. Discovering th
valuable as examining the data that were ultimately included in the repor
challenges and limitations can be found in Appendix A.

e we live, the environment, genetics, income, education level, social
ı care and information, and many other factors. A CHA is a way to show
is CHA covers the priority health topics identified by community partners,
ied by the CHA Core Team. Together, these topics include a broad range
individual's and a community's health. Topics include:

Immunizations
Deaths
Communicable Diseases
Non-Communicable Diseases
- Environmental Health
- Maternal and Child Health
- Mental Health
- Community and Family Violence

ed from territorial and federal sources (see Appendix B for a complete
own alongside comparable data or benchmarks from the Pacific Island

surveyed approximately 100 community members and asked them to
. Figure 2 below shows each component, as voiced by the survey

nbers also identified the most pressing health-related issues in the com-
es were chronic disease and associated risks, substance abuse (drugs,
ion and lack of available health care providers. Table 2 below lists the
health concerns that were identified.

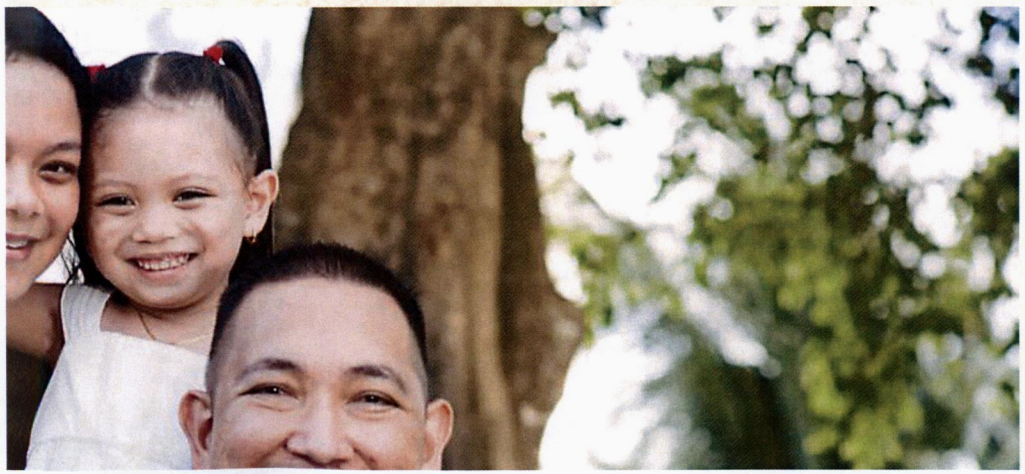


TABLE 2. Top CNMI Community Health Concerns, 2015

HEALTH CONDITIONS
- Cancer
- Diabetes
- Heart disease and high blood pressure
- Flu
- Infectious diseases
- Mental Health

ENVIRONMENTAL HAZARDS
- Sanitation and hygiene
- Animal control
- Pollution

LIFESTYLE AND
-Drug and alcc
- Obesity and
- Inadequate p
- Lack of healt
- Tobacco use
- Betel nut che

INJURY AND D
- Violence and
- Disabilities

Demographics are statistical data that describe a population's size, status and characteristics such as age, sex, race and ethnicity, language and economic status. Defining a community's demographic profile describes how many people live in the community, and helps to identify groups whose health may be affected by social and economicfactors. CNMI demographic information—including total population, age and sex structure, racial and ethnic origins, median age and language—is described below and in Figure 3.

Age, Gender, Race/Ethnic Origin, and Language

The CNMI land base totals 179 square miles. The majority of people living in CNMI reside on the three southern islands of Saipan, Tinian, and Rota. The northern islands are sparsely inhabited. More than 9 out of 10 Islanders live in Saipan.

In 2010, CNMI's population was estimated at 53,883, down from 69,221 in the previous 10 years. CNMI has a relatively young population: 14,361 people, or slightly more than one in four people, were under 15 years old. Children under 15 years (26.7%) almost outnumber adults 45 years and older (27.6%). The median age of CNMI's population is 33.4 (which is higher than the median age of 25.0 years in 2000). In 2010, the median age for women (34.4 years) was higher than for men (32.5 years).

Northern Mariana Islanders are diverse in race or ethnic origins. In 2010, nearly half of Islanders (49.9%) identified as Asian, and 34.9% as Pacific Islander. The largest groups of Asian and Pacific Islanders were Filipinos (35.3%), Chamorros (23.9%), Chinese (6.8%), and Carolinian (4.6%). About 2.0% of residents were White and less than 1% were Black, Hispanic or Latino.

More than 4 out of 5 Islanders spoke another language in addition to English. The most common languages included Philippine languages, Chamorro, Chinese, Carolinian and Korean. About 39% spoke another language more than they used English, and less than 2% did not speak English at all.

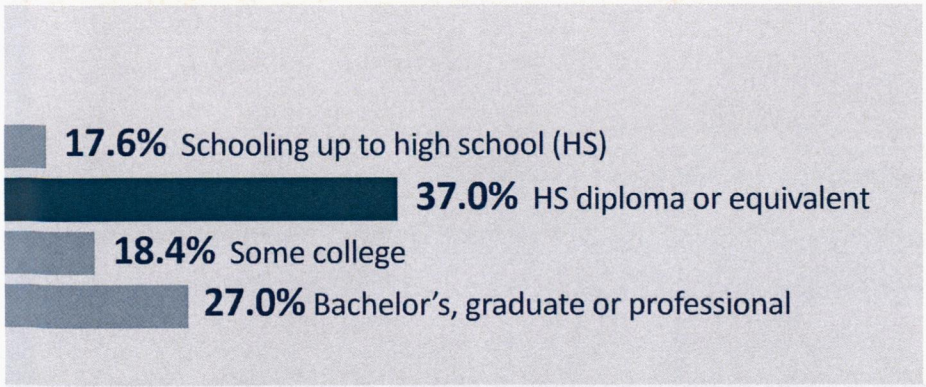
ditions are called social determinants of health. How income and wealth
r or not a person is employed, the working conditions one experiences,
using, and affordable, nutritious food are all examples of social determi-
of the most important social determinants of health: poverty status,

:he level of schooling completed for adults 18 years and older. 82.4% of
in 5 people, had a high school education or higher in 2010 compared to
ercentage of people in CNMI had a bachelor's, graduate or professional
for CNMI residents compared to 28.8% for the U.S).

:ome at or below the federal poverty line. Either an individual or a family
Islanders live in poverty. This percentage is more than three times the
ɔn living below the poverty level (15.4%).

ure of how many people 16 years old and over are generally available for
te shows the percentage of people in the labor force who are without a
ɛ 16 years and older, almost 28,000 (72.3%) were in the labor force. The
2%; the U.S. unemployment rate was 9.6%. Figure 4 shows data on these

h Among CNMI Residents, 2010



POVERTY STATUS

Percent living below the federal poverty level

52.3% 15.4%

aims to make it simple for people eating out to choose healthy foods.
to offer fresh, clearly-marked, healthy menu options. To learn more abo
project surveyed about 220 CNMI residents from January through Marc
healthfulness of the food options is an important factor when choosing
indicated that they would be more inclined to order healthy foods, inclu
clearly marked these items or did not charge for substitutions. Below is

Importance of Healthy Foods

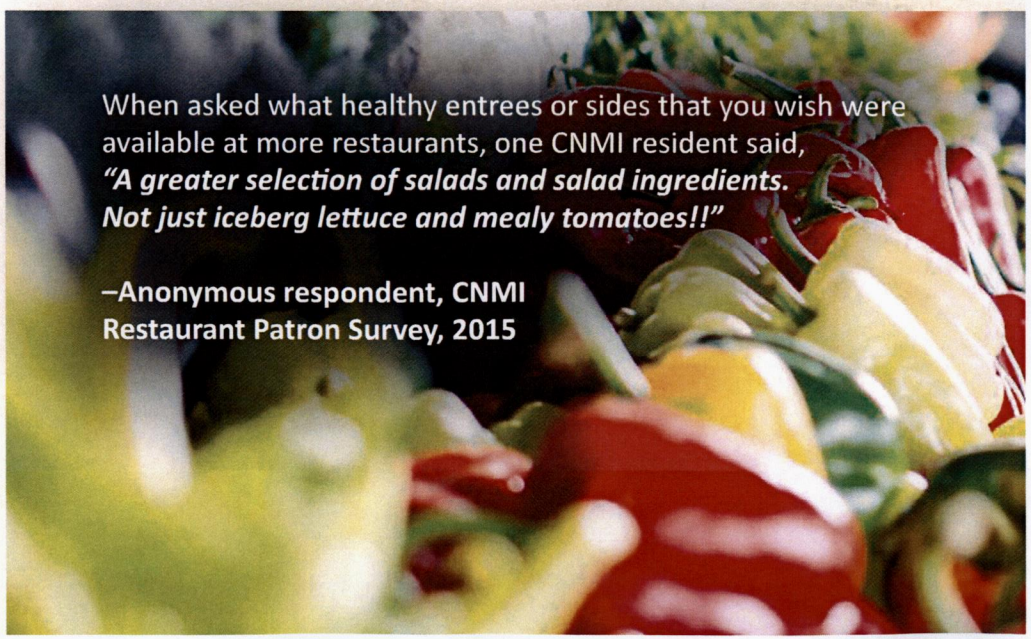
- The availability of healthy food ranked 4th out of 9 options for what p
selected a restaurant. Flavor, cleanliness/ atmosphere, and price were t
respondents' decision.

Availability of Healthy Foods

- Less than 10% were satisfied with the options of fruits and vegetable c

Choosing Healthy Foods

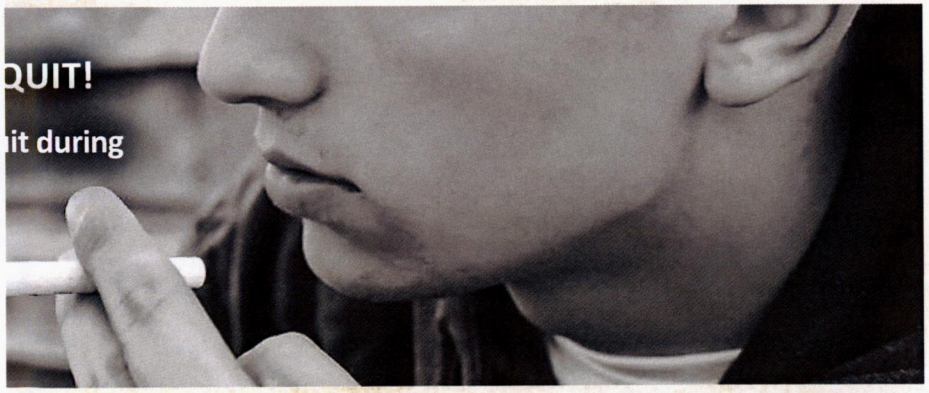
- Nearly 3 out of 4 respondents (72.7%) said they 'sometimes' choose l
- About 70.0% said that the likelihood they would order healthy items
bit' if restaurants highlighted or promoted the options.
- Only one of four respondents said they were 'always' able to identify
- 75.2% of respondents said that highlighting the locally-grown prod
they ordered.



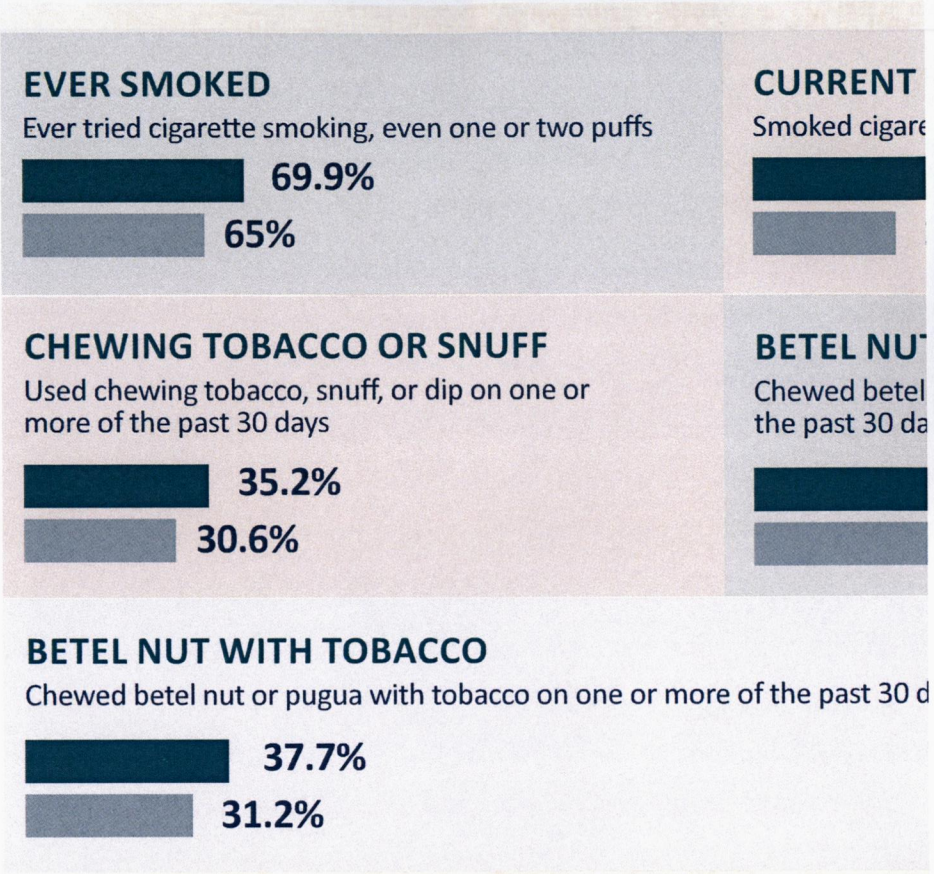
for heart disease, stroke, and cancer; overweight and obese adults are ronary heart disease, and some forms of cancer.[4,5] The negative health en preventable. Primary disease prevention strategies are actions that lth condition. Avoiding risk behaviors (like smoking and poor nutrition) strategy. Practicing healthy behaviors, such as getting vaccinations to ngs for early detection, and using a condom during sex to prevent sexu- evention strategy that can protect one's health. This section covers five tobacco, betel nut, alcohol, and illicit drugs, and obesity) among people

ttes, chew, and snuff – contain cancer-causing and toxic chemicals. That r for heart disease, stroke and cancer, which are the leading causes of

n cancer. Betel nuts, or areca nuts, come from the palm tree. After being ed alone or in combination with other substances like spices or tobacco; ed in a betel leaf before being chewed. Some people chew betel nut for practices; however, chewing it can have dangerous effects on health. It nd stomach), mouth lesions, and gum disease.[6]

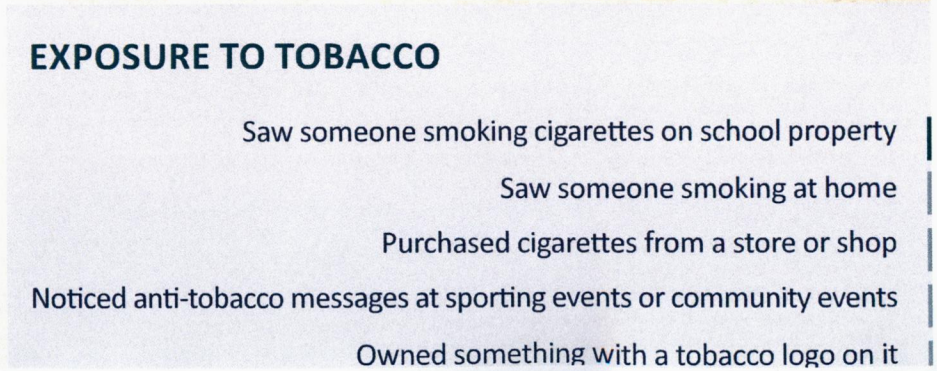


betel nut chewing among CNMI youth. The data reveal that tobacco use 13 Youth Risk Behavior Survey (YRBS) showed that nearly 65.0% of CNMI smoked a cigarette, compared to 41.1% of U.S. youth. Equally alarming s who currently smoke cigarettes (19.8% in CNMI compared to 15.7% in 013 show that students may be changing their behavior; the percentage lightly decreased from 69.9% to 65.0%, and current smokers dropped % of current youth smokers tried to quit in the past year. Chewing betel rn. In the most recent YRBS, more high school students reported chewing e (41.0%), and betel nut with tobacco (37.7%) compared to smoking



The data suggest that CNMI youth are exposed to tobacco use at home tising. Figure 6 shows how many CNMI middle school students reported students said they were exposed to cigarettes at home, while only one es at sporting or community events.

FIGURE 6. Youth Exposure to Tobacco Among Middle School Students, 2014



% of adult respondents smoked a cigarette in the previous 30 days. Also, 1 their youth; about three out of four adults who have ever smoked a : turning 21 years old. The CBHS gauged the community's awareness of ct of 2008 (later amended in 2011). The law prohibits smoking in public ' the majority of respondents (89.9%) knew about the law. Table 2 shows iew betel nut with tobacco. Almost one out of five adults (18.8%) chewed fore the survey. Among those surveyed, they chewed an average of 18.7

.6-46) that
ed places,

TABLE 3. Betel nut chewing with tobacco among adults, 2013

	Percentage
Never used at all 74.9%	12.9%
Used in past, but not past 30 days	6.3%
Used at least once in past 30 days	18.8%
No Response/Refused	0.1%

Source: CNMI Behavioral Health Survey, 2013.

3.

; associated with increased risk of disease, violence, and injuries. Figure ed using alcohol and how many CNMI youth abused alcohol (underage Behavior Survey (YRBS) reveals that 1 out of 3 youth (33.6%) were current 5 (19.4%) were binge drinkers. Only 1 out of 20 adults (5.7%) reported han the data for CNMI youth.

mong CNMI youth and adults, 2013

ays

CNMI ADULTS

Alcohol Use:

1 out of 18 drank within the last 30 days

Average Days of Alcohol Use:

Drug use can harm a person's physical health and their social relationsh and CNMI Behavioral Health Survey (for adults) both include questions re are shown in Table 4 and Table 5 below. Data indicate that marijuana adults. Among youth respondents, about 58.0% have ever tried it, and days (not shown in the table). These percentages did not change muc indicated that they had ever tried it, and about 31% had past-month us month use of marijuana. After marijuana, the most commonly-reported methamphetamine. Less than 3.0% of adults reported using "heroin, c least once in the past month.

TABLE 4. Illicit drug use among youth in CNMI and the U.S., 2013

EVER USED DRUGS AMONG YOUTH (used the drug one or more times during their life)	
Marijuana	
Methamphetamines	
Ecstasy	
Cocaine (Any form such as powder, crack, or freebase)	
Steroid pills or shots without prescription	
Heroin	

Sources: CNMI Youth Risk Behavior Survey Trend Analysis Report, 2013; United S

TABLE 5. Illicit drug use among adults, 2013

EVER USED DRUGS AMONG ADULTS (used the drug once in the past 30 days)	
Marijuana	
Heroin, crack or cocaine, methamphetamine	
Inhalants or sniffed/huffed substance	
Prescriptions drugs without doctor's orders	

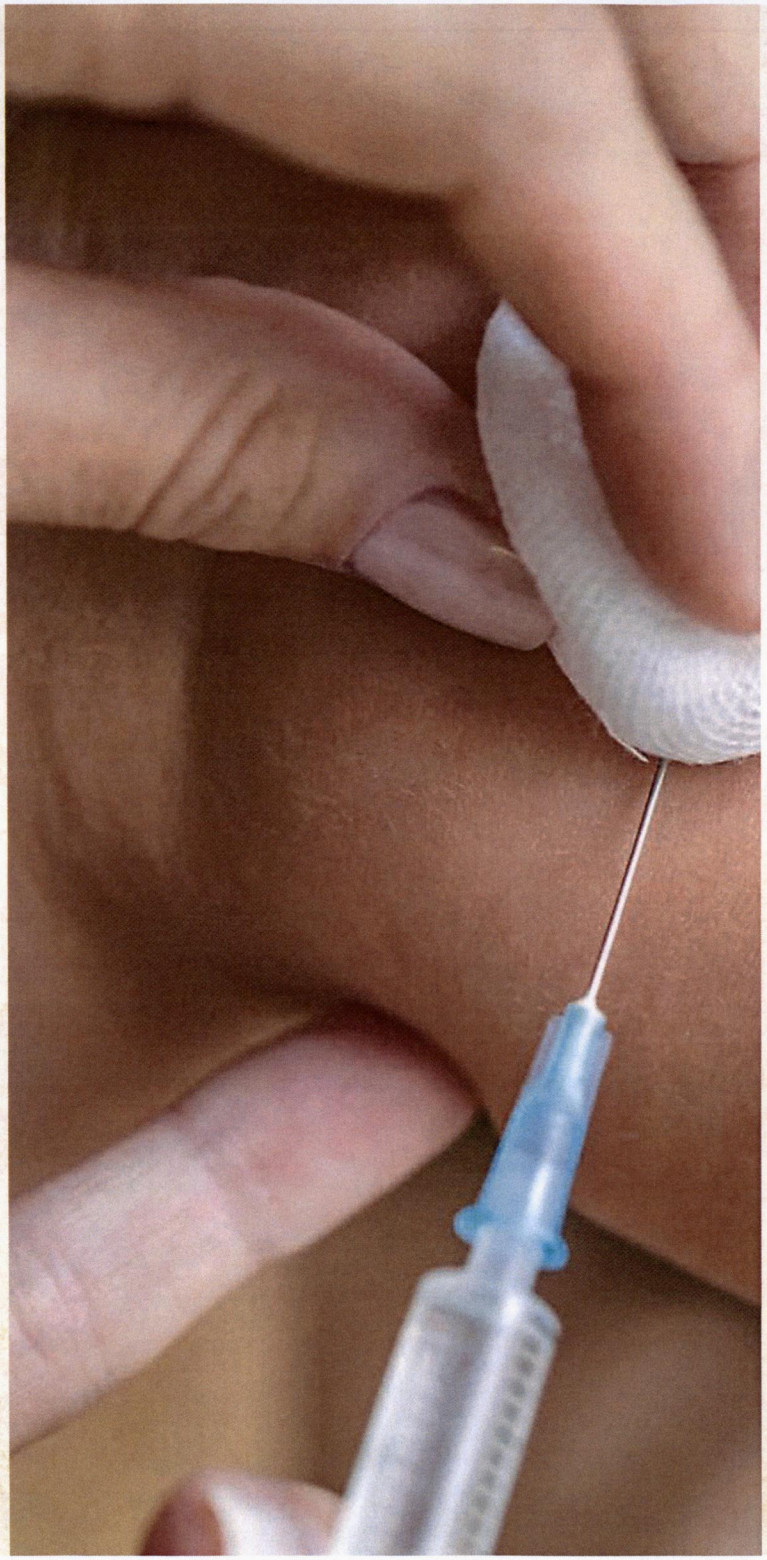
ease, and diabetes. Overweight and
ıts of Pacific Island nations, including
ies, more than 50% of the population
ı Organization (WHO) surveys.[7] While
ong CNMI youth are below 50%, it is

nts were classified as overweight and
neasured by their percentile for body
: percentages of students who were
.1 and 2013. When asked about their
le students described themselves as
ate many were female students aware
emales were classified as overweight
centage (35.7%) personally described
t. However, for male students, 32.0%
and only 24.0% personally described
. Weight status data were not available

cluding overweight and obese,

	2011	2013
ght or obese	30.2%	32.6%
Overweight	16.7%	16.8%
Obese	13.5%	15.8%
d themselves y overweight	25.8%	29.7%
Males	21.5%	24%
Females	30.5%	35.7%

13.
ove the 85th percentile but below the 95th
lefined as being at or above the 95th



Many infectious diseases such as influenza (flu), V
(HPV) are vaccine preventable. The CHCC recomm
of all ages, including infants, children, adolescents
of the Commonwealth Healthcare Corporation (CI
Registry (IR) system to monitor the level of the po
tions. This community health assessment focused
vaccinations among youth and adults, and human p
adolescents.

Childhood Vaccinations

Routine childhood immunizations prevent infection fron
pox, diphtheria, hepatitis A and B, measles, mumps, ar
the percentage of CHCC youth patients who are immu
nization guidelines. For each age group, the immunizat
Infants 1-3 months and children 7-10 years consistent
to the other age groups.

TABLE 7. Age-appropriate immunization rates for infa

Number and percentage of children who have rece immunizations			
AGE GROUP	**2010**	**2011**	
1-3 months	685 (49.9%)	803 (66.9%)	
4-5 months	356 (27.9%)	524 (44.2%)	
6-11 months	430 (26.1%)	520 (33.4%)	
12-14 months	71 (4.9%)	468 (34.1%)	
15-35 months	43 (1.3%)	178 (5.6%	
4-6 years	76 (1.5%)	241 (4.7%)	
7-10 years	2256 (31.2%)	2936 (43.7%)	

death. Flu vaccinations are recommended for people six months and need a flu shot every year. Slightly less than half (49.6%) of CNMI children Registry) in 2014 were vaccinated against the flu. Figure 9 provides data rates for children compared to adults. In 2014, a lower percentage of compared to adults: 45.1% for children 6 months to 17 years and 57.9%

d pneumococci, that can cause ear infections, bacterial pneumonia and erent vaccines have been developed to protect against them. The PCV7 nococcal bacteria. PCV13 was recommended as a replacement for PCV7 s 65 years or older in 2014. This assessment examined the PCV7 vacci- 2010 to 2014. (Future assessments that study data after 2014 should ious pneumococcal infections are common in young children and the tes of PCV7 for different age groups, including young children and elderly. slightly more than two out of five toddlers (44.1%), and slightly less than older were vaccinated against against pneumococcal diseases by using

ations among youth and adults, 2014

WHO'S VACCINATED AGAINST PNEUMONIA?

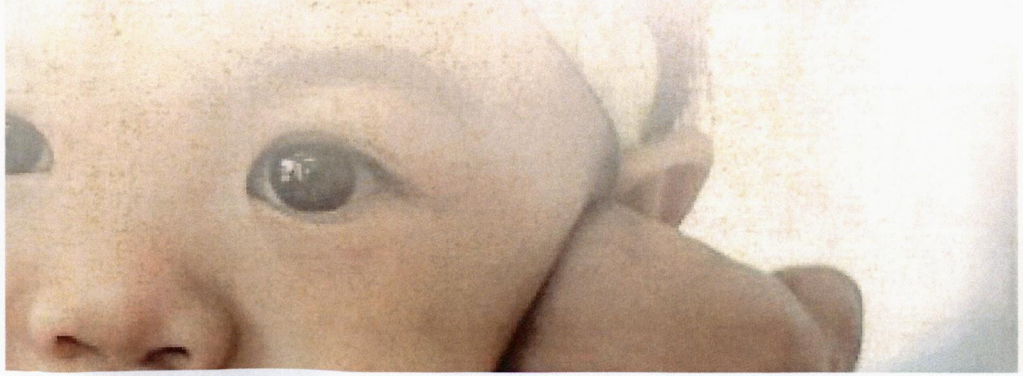
44.1%
toddlers ages 1 – 4 years

3.2%
adults ages 18 - 64 years

32.7%
children ages 5 – 17 years

19%
adults ages 65 years and older

ion, WebIZ Immunization Registry, Accessed September 2015.



The WebIZ Immunization data may underestimate immunizations rates

- The CHCC Immunization Program uses the WebIZ Immunization Re immunization records for all CNMI residents. At the time of th Immunization Program was in the process of transitioning records Therefore, data on immunizations should be considered preliminar is completed.
- Over the past decade, CNMI has had a substantial foreign worker p population has steadily declined since 2009, the CNMI population tc immigrants, migrant workers and temporary residents. This segment on CNMI differently than permanent CNMI residents; they may rece and that data is not captured in this report.

(See Appendix A for more information on data limitations.)

Human Papilloma Virus (HPV) Vaccination

HPV is a common virus among both males and females. The virus can ca genital-area cancers in both males and females. Guidelines state that H istered to adolescents 11-12 years; unvaccinated teens over 12 years ar indicate few adolescents had received the complete 3-dose series of the of 14-16 year olds and 22.4% of 17-18 year olds were vaccinated for H adolescent males were below 1.0%.

TABLE 8. HPV vaccinations among adolescents 14-16 and 17-18 years

Percentage of age group who complete HPV vaccination series	
	Both Sexes
14-16 year	12.4%
17-18 years	22.4%

Source: Commonwealth Healthcare Corporation, WebIZ Immunization Registry,

community's quality of life and how we might improve it. Tables 9, 10
s per year, sex and age at death, and leading causes of death in CNMI.
ome of the leading causes of disease can be prevented, or managed,
tyle.

g Causes of Death

1 CNMI. Females accounted for 62.2% of the deaths compared to 37.8%
alf of deaths (48.5%) occurred before age 60. For female deaths, 40.7%
ere were about 185 deaths each year. During the five-year period, the
308.6 deaths per 100,000) and highest in 2014 (427.3 deaths per 100,000).
2010-2014 were heart disease, cancer (all sites), cerebrovascular disease

, 2010-2014

TOTAL
172
161
175
200
220
928

ion, Health &
15.

TABLE 10. Age at death by sex, 2010-2014

Age Group (in years)	Females (N=351)	Males (N=577)
<10	5.1%	4.2%
10-19	0.6%	1.4%
20-29	2.3%	2.1%
30-39	4.8%	4.9%
40-49	11.1%	11.3%
50-59	16.8%	24.8%
60-69	23.1%	23.4%
70-79	18.8%	16.1%
80+	17.4%	12.0%
TOTAL	**100.0%**	**100.0%**

Cause of Death	Number	Percentage
TOTAL	**928**	**100.0%**
Heart disease [a]	210	22.6%
Cancer (all sites)	160	17.2%
Cerebrovascular disease (Stroke)	97	10.5%
Kidney disease or failure	60	6.5%
Diabetes	56	6.0%
Influenza and Pneumonia	30	3.2%
Accidental drowning & submersion	23	2.5%
Liver disease	22	2.4%
Suicide (Self-Harm)	12	1.3%
Tuberculosis	6	0.6%
Viral Hepatitis	5	0.5%
Other causes	247	26.6%

The highest death rates for the leading causes (heart disease, cancer, stroke, kidney disease, diabetes, influenza and pneumonia) all occurred in 2013. The cause-specific death rates for suicide, tuberculosis and viral hepatitis were not calculated due to low number of deaths each year.

Source: Commonwealth Healthcare Corporation, Health & Vital Statistics Office, Prepared November 2015.

Note: (a) Heart disease includes ischemic heart disease, hypertensive diseases, and other diseases of the circulatory system.

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392.4	402.6	408.6	410.4	407.9
299.0	306.7	311.3	312.7	310.8
181.3	185.9	188.7	189.6	188.4
112.1	115.0	116.7	117.3	116.5
104.6	107.3	109.0	109.4	108.8
56.1	57.5	58.4	58.6	58.3
--	--	--	--	--
--	--	--	--	--
--	--	--	--	--

ɔn, Health & Vital Statistics Office, Prepared November 2015.
nbers. Using low numbers to calculate rates raises concern for confidentiality, and
bility. Rates based on small numbers may fluctuate dramatically from year to year.

ɔm one person
. They are also
e diseases are
es, bacteria or
health assess-
ctions, includ-

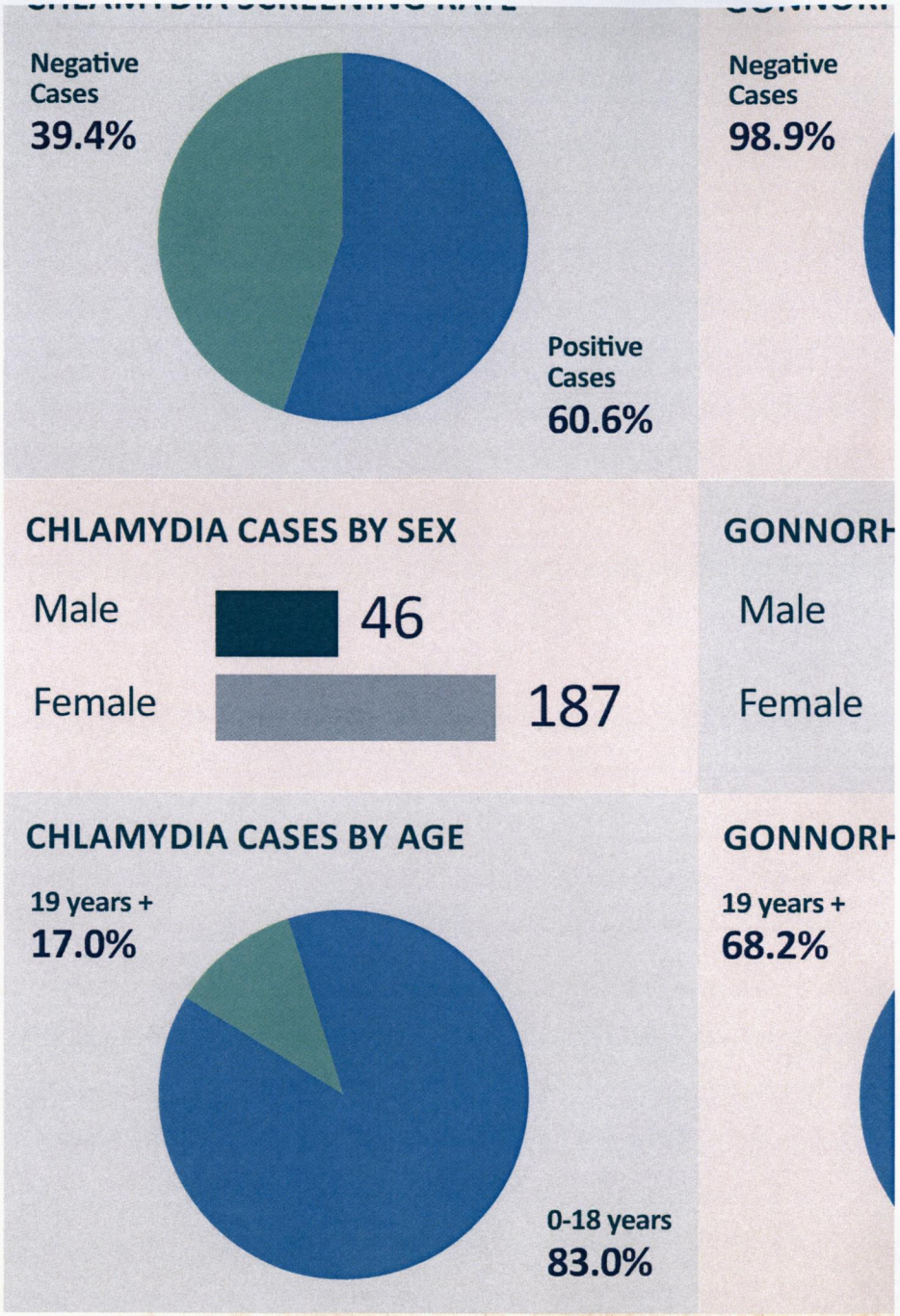
warts, herpes,
us (HIV), and
om person to
and gonorrhea,
are among the
de.

2013 through

gonorrhea. 60.6% of chlamydia screenings were positive. The number of STI cases detected above do not account for all infections in the CNMI, because people who have an STI but have not been tested but are not counted. Some STIs do not show symptoms so an individual may not be aware testing or treatment is needed.

There were fewer cases of gonorrhea; only slightly more than 1.0% of tests for gonorrhea were positive. Females represented 84.2% of all screenings, and the majority of positive cases. This was the case for both chlamydia and gonorrhea. Young people 18 years and under represent the majority of positive chlamydia cases (83.0%), but the adult population aged 19 years and older had a higher number of positive cases of gonorrhea (68.2%).

In many communities, more infections are diagnosed and reported among females than among males. The explanations vary, such as females use the health care



Source: Commonwealth Healthcare Corporation, EHR/RPMS, Prepared October

he Communicable Diseases section.) The CNMI Youth Risk Behavior Survey
cation opportunities among youth. Figure 11 shows that less than half
doms. The data show that the schools provide youth received sexual health
n were taught about HIV/AIDS in their school as show in Figure 11.

education among youth, 2013

(among
sexual inter-
st 3 months)

81.9%

Had been taught in school
about AIDS or HIV

were named a priority, data on these two diseases were not available for
ges and Limitations section for further discussion.) These diseases cause
for future assessments.

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gnosed or confirmed to have
used for primary diagnoses
to another part of the body.

ers check for disease when
nclude mammogram (breast
colonoscopy (colon cancer).

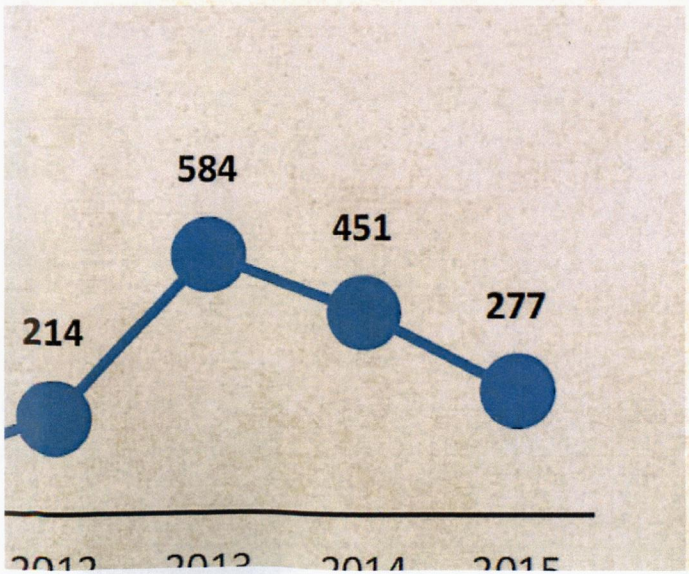
of cancer in a given year.

sure of how many people

not available at the time this report was compiled. However, hospital data does help estimate how many people are using the health care system for treatment of cancer. Particularly, the data shown here indicates how many patients received health care and how many times patients visited the CHCC for services (a patient can make multiple visits to the CHCC for a particular health issue).

CC at least once for a cancer-related service during 2010-2014. As shown
nade 1,776 visits; 2013 saw the most number of visits during the five-year
number of visits for "preventable cancers." A preventable cancer is a term
nted through early detection, lifestyle changes, or treatment; preventable
l, lung, oral, and prostate cancers. As shown in Table 14, the preventable
of outpatient visits was breast cancer (766 outpatient visits). Lung cancer
atient visits and days (66 visits and 447 patient days).

ts due to cancer, 2010-2015



	OUT PATIENT VISITS #	INPATI
ORAL CANCER	16	
COLORECTAL CANCER	409	
LUNG CANCER	353	
BREAST CANCER	**766**	
CERVICAL CANCER	86	
PROSTATE CANCER	146	
TOTAL CANCER	1,776	

Source: Commonwealth Healthcare Corporation, EHR/RPMS, Prepared October
Note: Data for January 2010-September 2015

Cancer Mortality

Cancer is the second leading cause of death in the CNMI in recent years. Th
men and women per year (based on 2010-2014 deaths), second only to ca
13, the most common cancers causing deaths were lung cancer, oral canc

FIGURE 13. Leading cancer deaths, 2010-2014

Lung cancer: 39 deaths
Oral cancer: 23 deaths
Female breast cancer: 13 deaths
Liver cancer: 13 deaths
Pancreatic cancer: 10 deaths
Gastric cancer: 10 deaths

Source: Commonwealth Healthcare Corporation, EHR/RPMS, Prepared November 2015.

able cancers – including breast, cervical, colorectal, lung, oral and prostate
ority of the preventable cancer mortality rates by individual year are not
mbers. The data indicates that lung cancer, which accounted for the most
tality rate for 2010-2014 deaths. While oral cancer had the third highest
ncers, it had the highest rate of death in 2013 and 2014 (lung cancer was

,000) for preventable cancers, 2010-2014

2011	2012	2013	2014	2010-2014
11.5	19.5	13.7	11.7	15.0
--	--	--	--	9.7
--	--	15.6	11.7	8.9
--	--	--	--	3.7
--	--	--	--	1.9

ion, EHR/RPMS, Prepared November 2015.
umbers. Using low numbers to calculate rates raises concern for confidentially,
nd reliability. Rates based on small numbers may fluctuate dramatically from

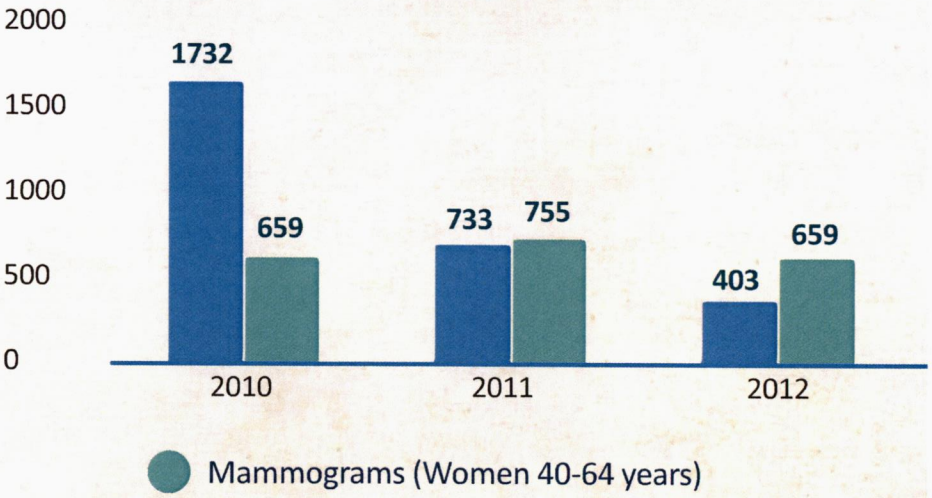
ers including breast, cervical, and colorectal cancers. Mammograms screen
vical cancer, and fecal occult blood testing (FOBT), sigmoidoscopy or colo-
These screenings can detect cancer in earliest stages and increase one's
ts and mammograms is provided below. Data on colonoscopies were not

ests and mammograms) provided at the Commonwealth Healthcare Cor-
own in Figure 15. More than 3,100 pap tests were performed at the CHCC,
lth Center (THC). On average, about 520 pap tests were screened for cer-
ap tests varied greatly from year to year; 1,732 were performed in 2010,
s. Potential reasons for these substantial decreases are likely due to issues
. Pap tests were not always available in CNMI. First, federal funds for the
vided screening clinics in the villages, ended in 2011. Second, laboratory
n April and August. During this time period, women had to deliver their

from a high of 775 in 2011 to a low of 471 in 2014, as shown in Figure
contributing factor that impacted how many women received mammogr
raphy-certified facility in CNMI until 2013. Second, administrative and m
contributed to the decrease in mammograms performed during 2010-20
facility, which had the only mammogram unit in CNMI, suspended mam
May 2011. Two additional occurrences resulted in mammograms not bei
between January and February 2012, and there was a lack of technicians t
ber 2012.

Figure 15 provides information on the outcomes of breast cancer screening
women screened, 29 women were diagnosed with breast cancer. In 2010
in the early stages of breast cancer. Detecting breast cancer in its early sta
2012 to 2014, the majority of women were diagnosed in the early stage r

FIGURE 14. Cancer screenings: mammogram and pap test, 2010-2014



Source: CHCC Laboratory Database (2009 – 2013 Pap Test data), EHR (2014 Pap Te
2009 – 2014.
Note: Screening populations:
(a) Pap Tests for women 20- 64 years; Procedures performed at CHCC, Rota Health
(THC). (b) Mammograms for women 40-64 years; Procedures performed at CHCC,
the CNMI prior to 2013.

RMED

40 - 64 years

N

cancer

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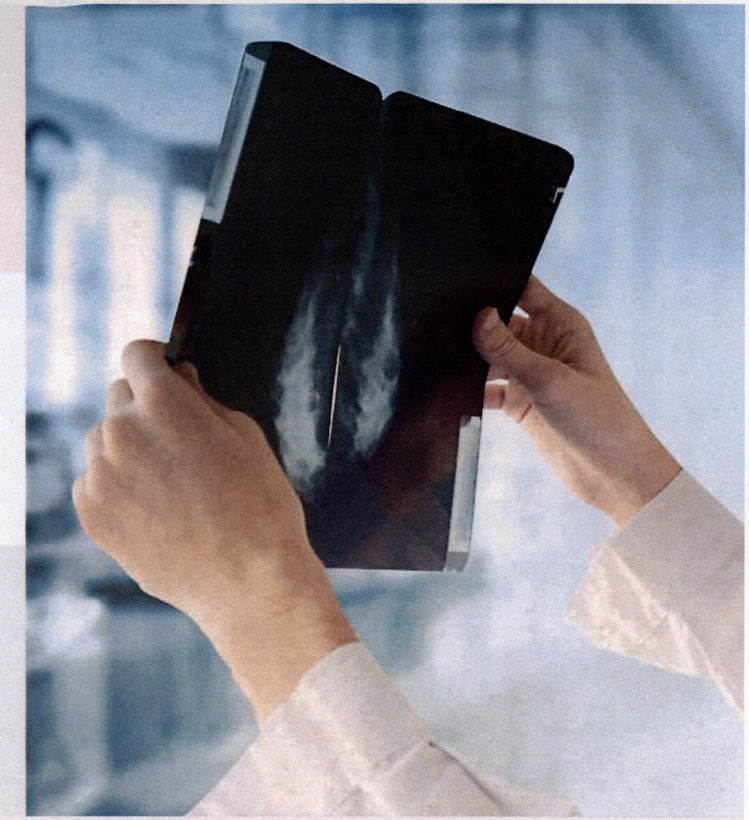
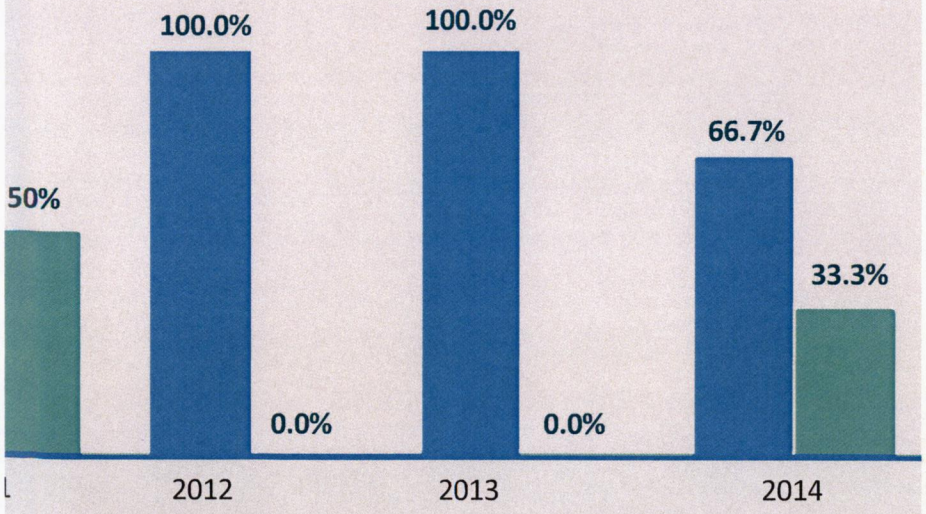
%

ages of



YEAR



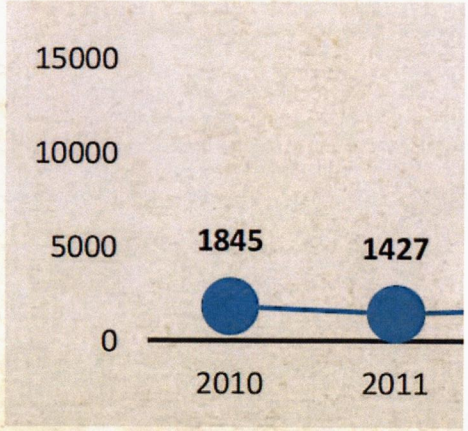
hormone that controls the amount of glucose (a form of sugar) in the blo
builds up in the blood instead of being used as energy. High blood sugar le
main forms of diabetes are Type 1, Type 2 and gestational. Most adults
If left untreated, all forms of diabetes can lead to serious health complic
amputations, or death.

Estimates of Incidence and Prevalence: The total number of new cases ar
tes in CNMI are both unknown. Certain assumptions were made to gene
were based on the availability of data in the CHCC Patient Information Sy
used may not give accurate estimates of diabetes prevalence in CNMI. T
identify anomalies in the data, and develop corrective actions to strength

Evidence shows that diabetes is a major health concern in CNMI. The mos
and incidence (that were available at the time of the report) were base
The first estimate is on the prevalence of diabetes, a measure of how ma
number of people living with diabetes increased from approximately 3,9
and 7.7% of the population from 2010-2011. The second estimate descri
cases. 2.4 and 1.7 people per 1,000 population were diagnosed with diabe
failure is a major complication of diabetes, especially in older people with d
of dialysis cases caused by diabetes. More than 110 people with diabetes
represents a small percent of all people with diabetes, often the most se

Diabetes Patient Visits: Lastly, data for patient visits show an increasing number of visits due to diabetes. About 2,700 people received health care at the CHCC at least one time for a diabetes-related visit during 2010-2014. Figure 16 shows the total number of patient visits for diabetes at the CHCC—over 24,600 for all five years. The majority of the visits were for outpatient services. Patients with diabetes made an average of 1,675 visits each year from 2010 -2012. This number of visits greatly increased to an average of about 9,800 visits for 2013 and 2014.

FIGURE 16. Patient visits due to dia



Source: Commonwealth Healthcare Co
Prepared November 2015.

s are addressed, improved, or eliminated. Environmental health encom-
er, and soil) and also the built environment (the buildings and structures
ater quality can pose health threats to humans who use the water recre-
:NMI Bureau of Environmental and Coastal Quality (BECQ) monitors surface
tment warns people of potential water hazards through beach advisory
Saipan shoreline where signboards communicate public advisory messag-
g."

contains excessive concentrations of fecal indicator bacteria called entero-
ter Quality Standards. These bacteria indicate the presence of human and
ce of the bacteria is storm water runoff, which may become polluted with
t and land-based waste (e.g. soil, animal feces, sewage, and decaying plant
cocci can cause gastrointestinal illness in swimmers. However, the bacteria
the enterococci found in recreational water is not generated from human

monitored, BECQ posted a total of 205 weekly red flags to warn people
e CNMI coastline. All beaches had at least one weekly posting, and on
kly postings. While all beaches had between 1 and 15 postings, the chart
eaches had very few postings. Nearly half of the 49 beaches that were
only one or two weeks during 2014.

CNMI beaches, 2014

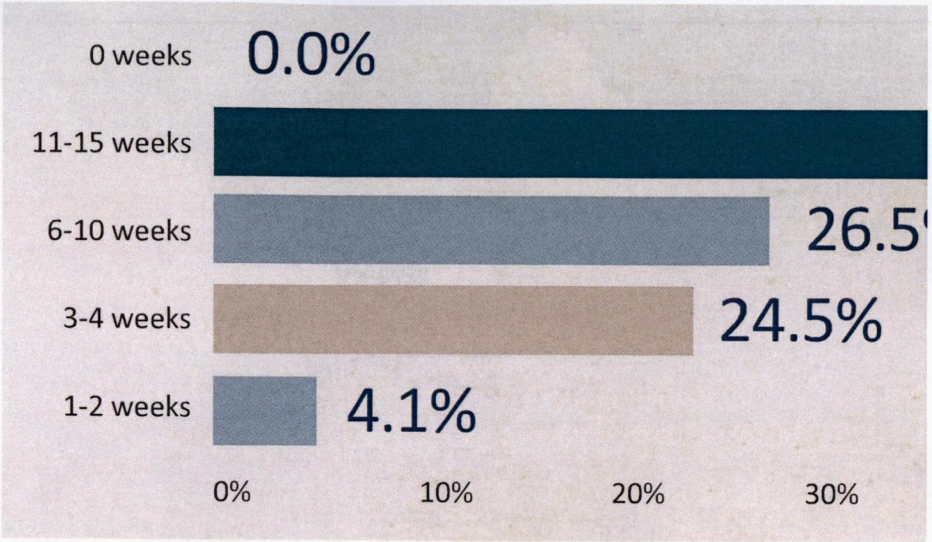
CHES
14

205
total postings

4.2
Average number of red flags posted on each beach per year

1
lowest number of red flag postings in a year

15
highest number of red flag postings in a year



Source: CNMI Bureau of Environmental and Coastal Quality, Retrieved October 2

Environmental Hazards Following Typhoon Soudelor

THE BECQ has programs for monitoring and addressing other health haza
people live. These programs were used in the aftermath of Typhoon Soudel
2015). To assist in Typhoon Soudelor recovery efforts and cleaning up th
BECQ and the U.S. Environmental Protection Agency accepted household
tronics for proper disposal.

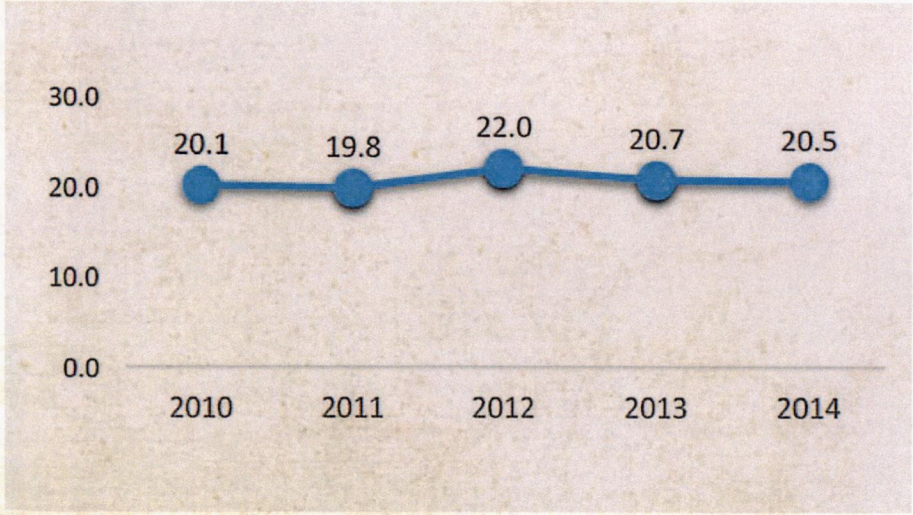
are preventable; many are due to complications and infections that can
umber of births, birth rate, and maternal, fetal and early childhood mor-
:ors are below.

are born in CNMI. Table 16 shows the number of births during the five-year

:h rate remained steady: between 20-22 births per 1,000 population.

re were no maternal deaths documented from 2010-2014. However, there
ng infants and children less than 5 years old. The infant and under 5 mor-
:ality, as shown in Table 17. The data show that infant mortality is a concern;
nt mortality can be broken down into sub-categories: fetal (before birth),
tal (28-364 days). The 2010-2014 fetal mortality rate (7.4 deaths per 1,000
and postneonatal rates (3.7 and 2.2 per 1,000 live births, respectively).
ributed to fewer than 10 deaths. The mortality rate was less than 1 child

FIGURE 19. Birth rate per 1,000, 2010-2014



rtality rates per 1,000 live births, 2010-2014

	6.0
	7.4
	3.7

Source: Commonwealth Healthcare Corporation, Health & Vital Statistics Office, Prepared November 2015.
Note: (a) per 1,000 births live births and fetal deaths combined

mental illnesses, are a group of distinctive disorders that affect how a per
adolescents, and children of all races, ethnicities and life circumstances can
like other diseases, like diabetes and heart disease, mental illness can be t
mental illness can interfere with a person's major life activities like work, soc
and choices.[9] Since each mental illness is distinct, each has its own risk fac
history of mental illness, substance abuse, chronic diseases, family and w
matic event stresses.

Signs of Emotional, Social and Psychological Distress

Certain feelings and behaviors of distress can be early warning signs of m
mental health care. Examples are feeling helpless, hopeless, worried, anx
ty to perform daily tasks and activities. The 2013 CNMI Behavioral Health
signs of mental health conditions. The extent of distress reported by adul

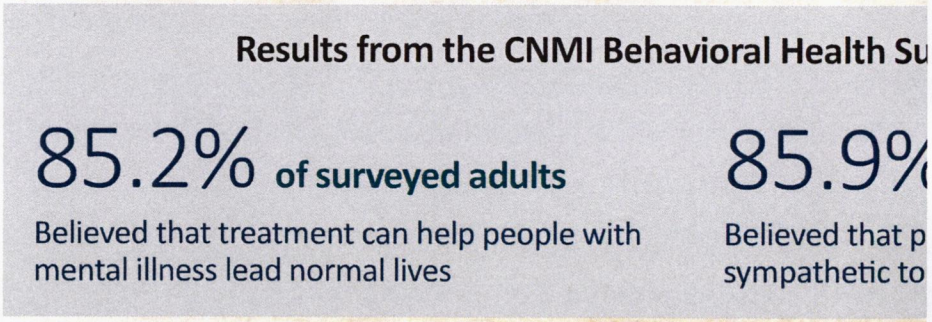
At least five days or more in the past month...

- 6.8% felt restless or fidgety
- 4.4% felt so depressed nothing could cheer them up
- 3.8% felt nervous
- 2.9% felt hopeless
- 1.6% had days a mental health condition or emotional concern kept th

Community Stigma Surrounding Mental Health

Even though people with mental illness can be treated, family members, frie
may hold negative or stigmatizing beliefs about someone with a mental h
can foster maltreatment of people living with mental illness. For example,
illness are dangerous, so they may avoid or exclude them.

FIGURE 20. Community perception of mental illness, 2013



Source: CNMI Behavioral Health Survey, 2013

The 2013 CNMI Behavioral Health Survey examined community percepti
20, the data indicate that community members have knowledge of mental
of people living with mental illness. The majority of community members

lividual uses force to physically or psychologically harm himself or herself, nce is considered to be any threats of or actual abuse, mistreatment, or other person to fear for his or her well-being or safety; with this type, the he abuser's family. Community violence occurs when someone intention- e (e.g. assaults or robberies). For self-directed violence, this assessment ation (thinking about, considering or planning suicide); for family violence, ect, and domestic violence; and for community violence, it examined data

th, 2013

Risk Behavior Survey show that....

tudents

e.

was shown to be the cause of 16 deaths from 2010-2014. Suicides repre- mortality rate was 6.2 deaths per 100,000. Data on suicide attempts were hat 14.7% of high school students attempted suicide in the past 12 months.

agnosed mental illness, a sense of hopelessness, and alcohol or drug abuse of people who died from suicide had several depressive symptoms or a diag there is a connection between mental illness and suicide, the vast major do not engage in suicidal behaviors.[13,14] Suicide is not only a mental healt factors that can influence suicide risk.

Figure 22 shows suicide ideation, or thoughts, among CNMI youth and a suicidal thoughts and attempts were common among youth. In 2013, alm ered attempting suicide within the past year. Young females reported ha that of their male peers (31.8% for females and 15.9% for males). Adults Health Survey reported much lower rates of suicide ideation (2.9%) than The rates of adults having thoughts of suicide were similar in Saipan (2.2%

FIGURE 22. Suicide Ideation among youth and adults, 2013

23.6% **of high school students**

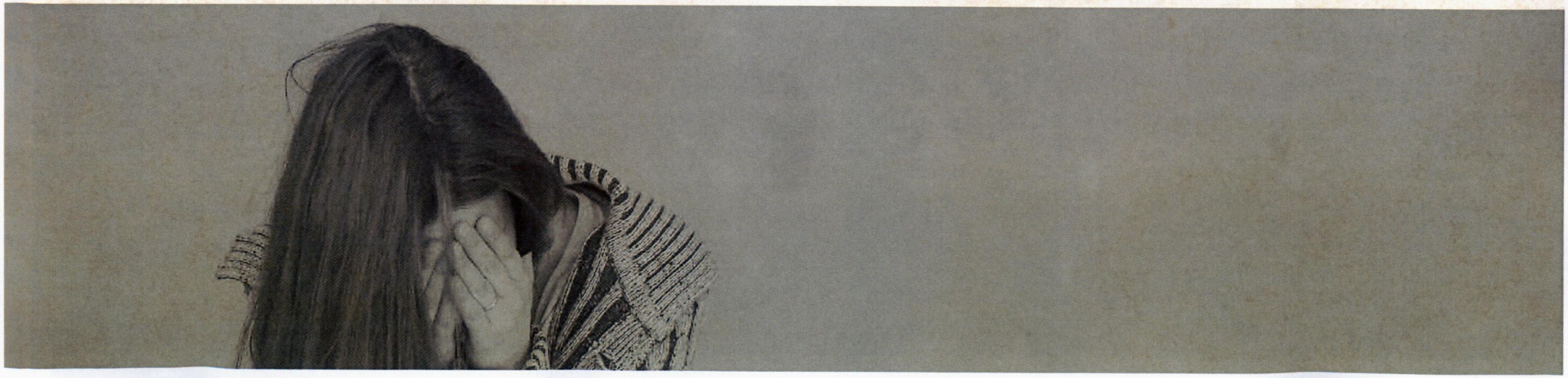
Considered suicide in the past 12 months

2.9%

Considered

Source: Youth Risk Behavior Survey, 2013.

10) World Health Organization. http://www.who.int/violence_injury_prevention/violence/global_campaign/en/chap7.pdf?u
11) World Health Organization. http://www.who.int/violence_injury_prevention/violence/global_campaign/en/chap7.pdf?u
12) Bertolote, J and Fleischmann, A. Suicide and psychiatric diagnosis: a worldwide perspective. World Psychiatry. 2002 Oct; 1(
13) Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. Br J Psychiatry. 1997;170:205-228.
14) Goldsmith S, Pellmar T, Kleinman A, Bunney W, eds. Reducing suicide: a national imperative. Washington, D.C.: Institute of

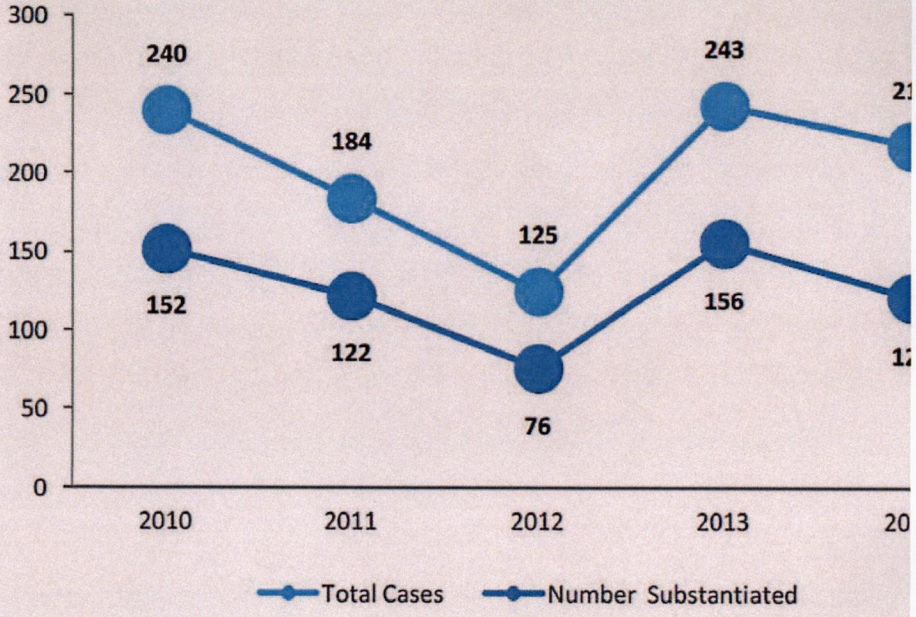


ual mistreatment, exploitation, or lack of care that results in injury or en-
ent.

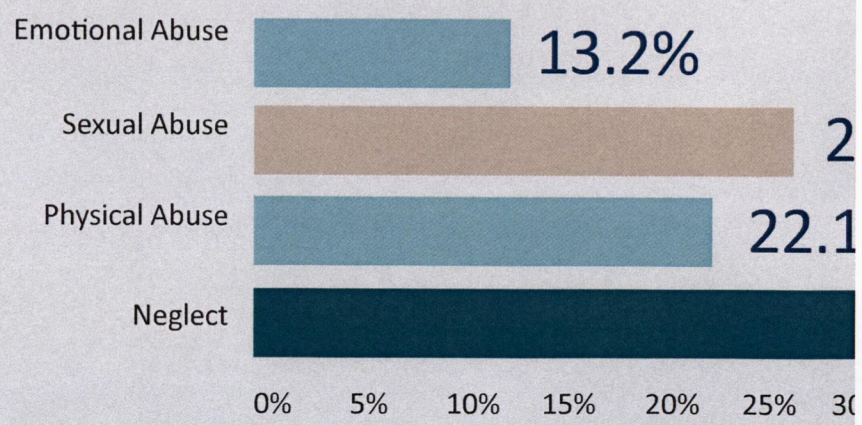
than 1,000 allegations of child abuse during 2010-2014. Figure 23 profiles
s based on data from the CNMI Division of Youth Services, Child Protection
orts of child abuse were or investigated by the Child Protection Unit. Each
were substantiated (meaning allegations were founded or supported by
children were the subjects of the allegations; so on average, two or three
de. The gender of the children in the case reports was nearly equal (48.8%

DPS) charges individuals suspected of child abuse with criminal offences.
neglect offences from 2011-2014 (and not the number of reports made or
glect, which may be more than the number of cases that result in charges).
child abuse and neglect during 2011-2014. 2012 and 2014 had the highest
vely). For these two years, the number of child abuse or neglect offences
olence offences.

Child Maltreatment Reported and Substantiated Cases



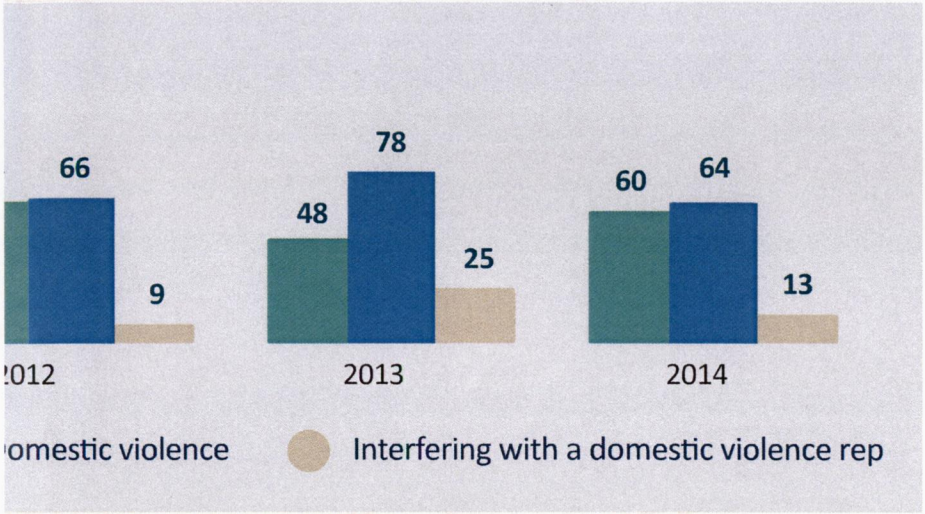
Types of Child Maltreatment



Source: Child Protection Unit, Division of Youth Services, Provided October 2015.

ınal, economic, or psychological actions or threats.[15] Data from the was gathered by the CNMI Criminal Justice Planning Agency, indicate that many CNMI residents. See Figure 24. From 2011-2014, DPS reported an r year, as high as 110 in 2011 and as low as 64 in 2014. In addition, a total h a domestic violence representative were documented for the 4-year

ılence offences, 2011-2014



cy; Criminal Offense Statistics, 2011-2014.

TABLE 18. Homicides: number and rate, 2010-2014

Homicides (Total)	10
Mortality rate per 100,000 population	3.9

Source: Commonwealth Healthcare Corporation, Health & Vital Statistics Office, Prepared November 2015

CHCC is committed to achieving optimal health and well-being for the pec will require planning and partnership to improve quality, accountabilit assessment is part of a larger effort towards data-based planning and c ability for making measurable improvements in health outcomes. The o ment was to provide a comprehensive report of CNMI's health data community's overall health, identify health improvement priorities, and formation on partnerships, resources, and timeframes. By providing a ce about the health status of the CNMI, DPHS aims to increase collaborat integrate public health data systems to better assess and understand those needs.

DPHS strives to mobilize community partnerships, empower the comm sense of ownership among the people of CNMI. Information gathered used to educate and mobilize communities on the most pressing health i es, and develop a plan for improvement. Our next step will be to work holders to develop a "community health improvement plan" to address nity. DPHS will continue to use public health accreditation as a framew the health information management system, addressing inefficiencies, CNMI. Improving health in the CNMI will take a commitment by all of us healthy choices for our communities, and for our families.

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Small Numbers and Statistical Reliability

For certain health indicators, data were too few to report. As a guideline, caution is made when reporting health events of less than 10. There are two reasons why caution is advised: confidentially and accuracy. First, public health data should be released in a way that individuals' confidentiality is maintained. Even though no one's individual information is presented in the CHA, individuals in small communities can often be identified when small numbers are used. Second, small numbers raise concerns about the statistical analysis and accuracy of data. When numbers are small to begin with, a tiny increase or decrease in the number can result in a major change in a percentage or rate. Rates are considered to be 'unstable' when small numbers are used in the calculation, and are less useful for making conclusions and decisions.

For example, this report relies on small numbers for cancer-specific mortality rates (shown by year). For many of the years, there were too few counts of cancer to calculate a meaningful rate. With the cancer mortality rate and other indicators throughout the report, data have been intentionally suppressed (or not presented) when the numbers were deemed too small for reporting.

This report did not use statistical significance testing for analyzing the public health data. Generally, statistical tests are conducted to assess the probability that an observed difference between variables are due to chance. Although statistical significance is important, it is not the only measure of public health importance, or 'practical significance,' needed to identify which issues should be addressed to improve the community's health. The CHA includes a variety of measures, whether statistically significant or not, that potentially have an impact on decisions on health care in CNMI

Health Indicator Omissions

Some important gaps in the availability of CNMI data were identified. Tuberculosis, HIV/AIDS, viral hepatitis, bleeding disorders, and serious emotional disturbances/serious mental illness were identified as priority topics for the CHA. However, data were not available for these topics, so the indicators were omitted from this report. Wherev-

TOPIC	HEALTH INDICATOR
Community Defined Health	- Community health defined by residents - Community health concerns
Demographics	- Population structure - (age, gender, race/ethnic origin) - Languages spoken
Social Determinants of Health	- Education - Poverty - Employment - Healthy food availability
Health Behaviors	- Tobacco use - Betel nut chewing - Alcohol abuse - Illicit drug use - Overweight and obesity
Immunizations (Vaccine Preventable Diseases)	- Childhood immunizations - Flu - Pneumococcal pneumonia - Human papillomavirus (HPV)
Mortality (Causes of death)	- Leading causes - Mortality rate
Communicable Diseases	- Chlamydia - Gonorrhea
Non-Communicable Diseases	- Cancer - Diabetes
Environmental Health	- Water hazards on beaches
Maternal, Infant, and Child Health	- Births - Maternal, infant & child mortality rates
Mental Health Conditions	- Mental and emotional health - Community stigma
	- Suicide (self-harm) - Suicide

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