Fort Wainwright Community Health Assessment 2020



Compiled by the Ft. Wainwright Department of Public Health

APPROVED: 23 Jan 2020

Table of Contents

Message from the Chief	3
Executive Summary	4
Background and Purpose	5
Data Method and Sources	6
Community Health Assessment	10
Community Strengths and Themes Assessment	28
Local Public Health System Assessment	60
Forces of Change Assessment	66
Community Assets and Resources	69
Recommended Focus Areas for Community Health Improvement Plan	71
Acknowledgements	72
References/Data Sources	73

Message from the Chief of the Department

Dear Arctic Warrior Family,

The 2020 Fort Wainwright Community Health Assessment further expands our ability to engage in a comprehensive approach to improve the health of all Fort Wainwright residents. Fort Wainwright is home to the "Arctic Warrior" where Soldiers, families and civilians take pride in supporting USARAK and its "Ready Now" combat mission. A critical component to being "Ready Now" is protecting and preserving the health and quality of life of the Force.

This document is a comprehensive analysis of public health data providing a snapshot of the current health status of our community. This information informs leaders and decision-makers and allows them to prioritize and develop strategies to improve the overall health of the Arctic Warrior Family. From this document, we will further develop a blueprint to improving health – the Fort Wainwright Community Health Improvement Plan (CHIP).

Improving health is not just the responsibility of the Fort Wainwright Department of Public Health, it is a team effort. It is our hope that this assessment also informs and stimulates collective action all throughout installation agencies and units that play an important role in a healthy Fort Wainwright.

We all strive to make Fort Wainwright a healthier community. We can only achieve this through positive changes at the individual, school, workplace, and community level in addition to improvement in our installation public health infrastructure. The CHIP will provide a vision, common language, direction, and systematic approach for installation stakeholders to synchronize efforts as we improve the health of our community. Implementation of the CHIP strategies and activities will commence beginning in 2020 and will be monitored through the Commander's Ready and Resilient Council process.

We invite you be part of the "Partners in Prevention" team as we embark on this exciting journey to better serve you.

LTC Kyndra A. Jackson DNP, MPH, RN-BC Chief, Fort Wainwright Department of Public Health

Executive Summary

The 2020 Fort Wainwright Community Health Assessment was completed using a collaborative process with key installation, military community, and neighboring community partners and stakeholders. These assessments collect and analyze data along with present information to describe the health of the community, identify contributing factors that impact health outcomes, and identify community assets and resources that can be mobilized to educate and improve the community's health. The Fort Wainwright Department of Public Health (DPH) led the collaborative process to complete the CHA for Fort Wainwright, AK.

The 2020 Fort Wainwright Community Health Assessment includes the following components:

- A community profile providing overall information on community demographics and socioeconomic factors, including social determinants of health
- An overview of the clinical care, health behaviors, health outcomes and public safety on Fort Wainwright
- Results from the FY 18 Community Strengths & Themes Assessment
- A description of the Forces of Change Assessment. This assessment identifies forces—such as trends, factors, that are or will influence the health and quality of life of the Fort Wainwright community

Among Fort Wainwright Active Duty Service Members, 29 percent are tobacco users, exceeding Army prevalence. Soldiers have a lower injury incidence (1,610 per 1,000 person-years) than overall Army rates (1,821 per 1,000 person-years).

According to the Community Strengths & Themes Assessment, 52 percent of respondents felt injuries were the top physical health-related concern at Fort Wainwright. Sexually Transmitted Diseases are considered the second physical health related concern with 44% of community members responding. Fifty-six percent of community members felt that getting more sleep was an activity they wanted to engage in to improve health. Making healthier nutritional choices was mentioned by 42% of community members. Depression was identified as the greatest behavioral/emotional risk factor causing concern on the installation (66%).

Background and Purpose

Public Health Departments are charged with providing the 10 essential public health services by implementing and evaluating public health programs and activities to addressing health problems and opportunities across a community. This is only achievable through a comprehensive community assessment. Assessment is one of the three core Public Health functions and is the first step in addressing issues of public health importance. A population-based model of practice analyzes health status (risk factors, problems protective factors, assets) within populations, establishes priorities, and plans, implements and evaluates public health programs and strategies. All public

health programs are to be based on the needs of the community. As communities change, so do community needs. Public Health Departments need to assess the health status of its population on an ongoing basis so that public health programs and services respond appropriately to new and emerging problems, concerns and opportunities.

The 2020 Ft Wainwright Community Health Assessment is a systematic examination of the Arctic Warrior community's health status used to identify key health issues and strengths across the Force. This assessment will inform installation leaders and community stakeholders on how best to prioritize and allocate resources to improve population health. Recommendation from this assessment will be used in the development of the Fort Wainwright Community Health Improvement

ASSESSMENT Monitor ASSURANCE Evaluate Health Assure Diagnose stem Managemen Competent Workforce & Investigate Research Link to / Provide Educate, · INEWdo TEREO LAND Empower Care **Enforce** Develop **Policies**

Plan (CHIP). The improvement plan will formally prioritize community health efforts and provide a roadmap on how to achieve success.

Community health improvement efforts are of great importance to installation leaders and community members alike. As such, progress and updates will be visible to the installation's Senior Mission Commander through the Commander's Ready and Resilient Council (CR2C). It is also a requirement outlined in Army Regulation 40-5 (Preventive Medicine). The CHA is a tool that brings a sense of urgency to the health issues of a community. It also empowers community members and stakeholders to spring into action through a commitment to health.

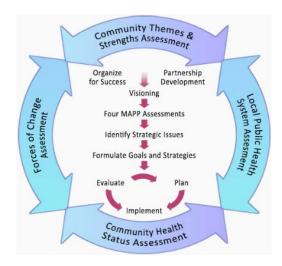
Data Method and Sources

Results and recommendations outlined in this document are derived from the comprehensive analysis of four elements: CHSA tool (compilation of installation and local health data); Community Strengths and Themes Assessment (community feedback about the quality of life and perceptions about health and wellness); Local Public Health Systems Assessment (summary regarding community strengths in delivering the 10 essential public health services) and Forces of Change Assessment (assessment of the external factors impacting community health improvement).

Fort Wainwright's first CHSA was completed in 2017. From that initial assessment, updates were completed through the use of a variety of military and civilian population based data sources. Data was then entered into the Army Public Health Center (APHC) CHSA tool and analyzed to identify health issues of significance based on local, state and national benchmarks. Population data sources used include: Army Disease Reporting System internet (ADRSi), Centers for Disease Control and Prevention (Behavioral Risk Factor Surveillance System (BRFSS), Selected Metropolitan/Micropolitan Area Risk Trends (SMART), Youth Risk Behavior Surveillance System (YRBSS), Breastfeeding Report Card, FluVax View, and Lead Data), Community Commons Community Health Needs Assessment Report, Defense Enrollment Eligibility Reporting System (DEERS), Healthy Alaskans 2020, Kids Count Data Center, MEDCOM/PH 360, Alaska Department of Labor, Tricare, and CarePoint.

The Ft Wainwright Community Strengths and Themes Assessment is completed every two years and is designed to provide a deeper understanding of issues that relate to the community members' perceptions of quality of life, health, safety, and satisfaction within the environment of an Army installation. This assessment compliments objective health data gathered through the CHSA tool by potential shedding light on behaviors/habits or resource gaps that lead to negative health outcomes. Fort Wainwright's most recent Strengths and Themes assessment was completed in FY 18 (Jun 18) with a sample size of 735 completed surveys. This assessment is facilitated by the Installation Community Ready and Resilient integrator.

The Department of Public Health (DPH) completed the Local Public Health System Assessment and Forces of Change Assessment between Apr-Jun 2019. Both assessments were facilitated though the CR2C Physical Health Working group. Many of the DPH leadership were part of this working group and this group is a platform to access most of the installation stakeholders and community members vested in the health of our community. Utilizing the PHWG to facilitate the assessment also provides additional assurance that information will be disseminated and shared throughout the CR2C channels.



Fort Wainwright Overview

From a cold weather test station to one of the Army's premier training areas, Fort Wainwright has come a long way. Covering over a million acres, the post has seen numerous face lifts, a branch change, a new name, and thousands of soldiers, family members and civilians. The base was named Ladd Field, in honor of Maj. Arthur Ladd, an Air Corps pilot killed in a crash in 1935.

The first Air Corps detachment assigned to Alaska arrived in Fairbanks in April 1940. Another 118 soldiers joined them in October. They lived in temporary shelters until permanent barracks were constructed. The men tested clothing and equipment during the bitter cold winters until World War II. Ladd Field then took on a bigger role, that of transfer point for the Lend Lease Program, in which the U. S. delivered nearly 8,000 aircraft to Russia.

The Army assumed control of Ladd Air Force Base in January 1961 and renamed it Fort Jonathan M. Wainwright honoring the general who led delaying tactics on Bataan and Corregidor in the Philippines against a superior Japanese force in World War II.

Since 1961, the post has been home to the 171st Infantry Brigade, 172nd Infantry Brigade, 6th Infantry Division (Light), and 1st Brigade, 6th Infantry Division (Light), once again, the 172nd Infantry Brigade (Separate), 172nd Stryker Brigade Combat Team and presently the 1st Stryker Brigade Combat Team, 25th Infantry Division. The post is also home to Task Force 49, a brigade-size aviation unit with CH-47 Chinooks, UH-60 Black Hawks and OH-58 Kiowas, as well as support personnel.

Today's units include infantry, field artillery, engineer, logistical support and medical personnel. When a tactical unit is called upon to deploy, the support faction activates immediately to make the deployment fast, safe and efficient. Each unit works with the other to ensure a rapid response and a smooth operation. The 50-man detachment of 1940 ultimately grew into today's 7,700 soldiers. The soldiers of the US Army Alaska, at Fort Wainwright are prepared to rapidly deploy worldwide in defense of U.S. interests or on humanitarian missions.

Welcome to Fairbanks, Alaska Fairbanks North Star Borough and Fort Wainwright



Welcome to Fairbanks, AK – the town in which Fort Wainwright resides. Fairbanks North Star Borough is home to about 100,000 people, making this region the second largest population center in Alaska. Fairbanks city features a university, Fort Wainwright, an Air Force base (Eielson AFB) and is known for dog mushing, northern light and its extremes of light, dark, warmth and cold. In winter, temperatures as low as -62 degrees have been recorded while temperatures in the 80s are common in the summer. Summer days are also long – Fairbanks enjoys more than 22 hours of daylight when the solstice arrives on Jun 21st. These extreme environmental conditions

bring additional challenges when addressing public health issues, which require a collaborative approach that we strive to strengthen.

Defining our "Community"

Mission

Fort Wainwright's mission is to deploy combat ready forces to support joint military operations worldwide and serve as the Joint Force Land Component Command to support Joint Task Force Alaska. Our strategic location, superior training capabilities and dynamic relationship with our local civilian communities make Fort Wainwright and United States Army in Alaska a significant national asset and world-class power projection platform for military operations anywhere in the world.

Tenant Units and Supported Commands:

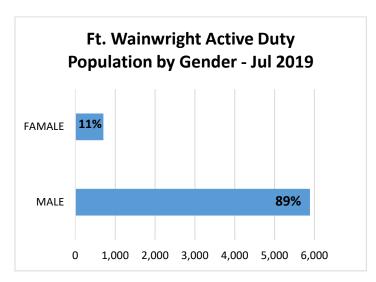
- 1. US Army Alaska (USARAK)
- 2. 1-25 Stryker Brigade Combat Team
- 3. USARAK Aviation Task Force
- Medical Department Activity Alaska
- 5. Dental Activity (DENTAC)
- 6. Public Health Activity Fort Lewis
- 7. Northern Warfare Training Center (NWTC)
- 8. Cold Regions Test Center (CRTC)
- 9. 402th Army Field Support Battalion
- 10. Network Enterprise Center FWA
- 11.3rd Air Support Operations Squadron (USAF)
- 12. Cold Regions Research and Engineering Laboratory (CRREL)
- 13.U.S. Army Reserve
- 14. BLM Alaska Fire Service
- 15. Arctic Support Command

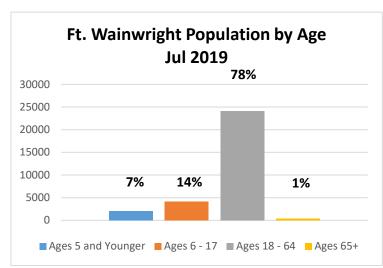


Community Health Profile

Fort Wainwright Demographics

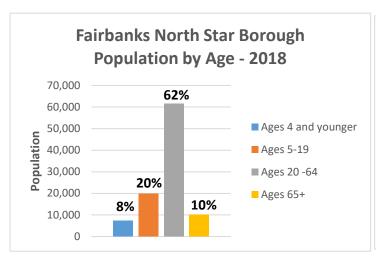
According to the Bassett Army Community Hospital (BACH) Resource Management Office, there are 24,924 enrolled TRICARE beneficiaries living within a 40 mile radius of Fort Wainwright. As of July 2019, there were currently 6,591 Soldiers stationed at Fort Wainwright (USARAK G-1 Office, 2019). Including families and the civilian workforce the total Fort Wainwright population is approx. 31,043. The 2018 local population estimate for Fairbanks North Star Borough is 98,971 (US Census, 2019). The Fairbanks North Star Borough population total includes active duty, beneficiaries and veterans.

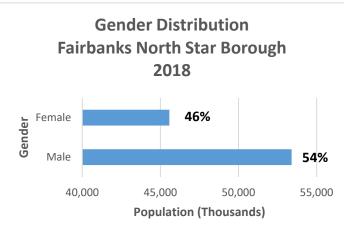




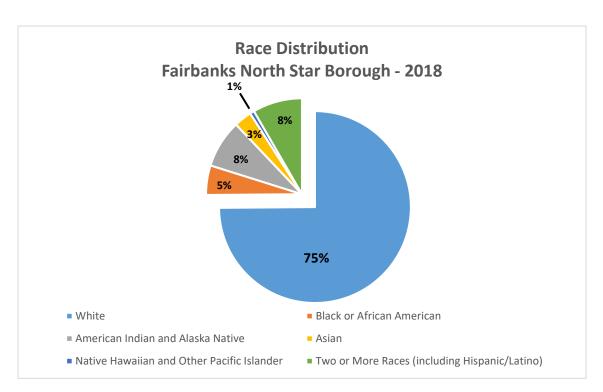
Source: USARAK G-1 Office, 2019 Source: USARAK G-1 Office, 2019

Fairbanks North Star Borough Demographics



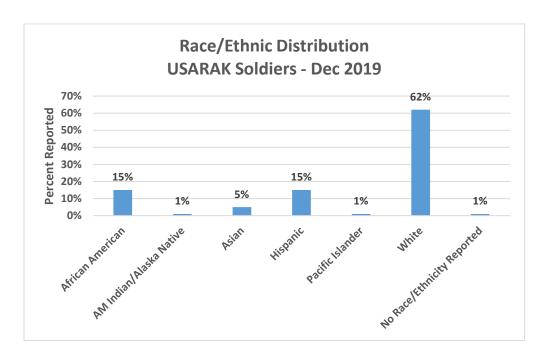


Data Source: US Census Bureau. 2018 American Community Survey 1-Year Estimates. Retrieved at: https://www.census.gov/programs-surveys/acs/



Data Source: US Census Bureau. 2018 American Community Survey 1-Year Estimates. Retrieved at: https://www.census.gov/programs-surveys/acs/

The majority of the Fairbanks North Star Borough population is between the ages of 20-64. The median age is 32 years. There is a pretty even distribution between genders with male being the larger group at 56%. The predominate race in the borough is White (75%) with American Indian/Alaska Native and those that identify as two or more races being the next most represented ethnic group - both reporting 8%.



Data Source: Fort Wainwright/USARAK North Equal Opportunity Office; Electronic Military Personnel Office Data; Retrieved Dec 2019

USARAK Active Duty Soldier population ethnic make-up is predominately Caucasian (62%). African-American and Hispanic Soldiers are the next largest ethnic group represented with 15% of Soldiers identifying with each respective group.

Social and Economic Factors

Economic Well-Being and Household Income: Military basic pay is standardized by rank and time in service. This standardized pay is published each year by the Department of Defense through Congressional approval. Basic pay is received by all and is the main component of a service member's salary Access to current military pay tables can be found at: https://militarypay.defense.gov/Pay/

Additional Pay Allowances: Allowances are another critical element of military pay. Allowances are moneys provided for specific needs, such as food or housing. Monetary allowances are provided when the government does not provide for that specific need. The most common allowances are Basic Allowance for Subsistence (BAS) and Basic Allowance for Housing (BAH).

BAS is meant to offset costs for a member's meals. This allowance is based in the historic origins of the military in which the military provided room and board (or rations) as part of a member's pay. This allowance is not intended to offset the costs of meals for family members. Because BAS is intended to provide meals for the service member, its level is linked to the price of food. Therefore, each year it is adjusted based upon the increase of the price of food as measured by the USDA food cost index.

BAH is an allowance to offset the cost of housing when you do not receive government-provided housing. BAH depends upon location, pay grade and whether you have dependents. BAH rates are set by surveying the cost of rental properties in each geographic location. Therefore, BAH rates in high-cost areas will be much greater than those in low-cost areas. These allowances ensure that Active Duty Soldiers and their families are able to afford living off post.

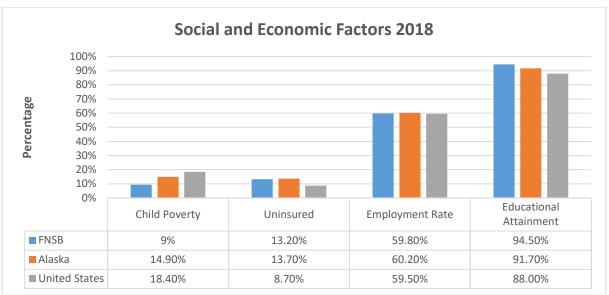
Poverty: The US Department of Health and Human Services (HSS) releases the federal poverty level (FPL) guidelines annually. The FPL is also known as the "poverty guidelines". Adjusted each year for inflation, the FPL can help determine if a family qualities for certain government benefits, such as Medicaid, food stamps or funds for education. Military families may be eligible for some of these benefits based on their income. According to the US Census, within Fairbanks North Star Borough, 8.6 percent of the population are living below the FPL guidelines.

Unemployment: According to the Alaska Department of Labor and Workforce Development, the unemployment rate for Fairbanks North Star Borough (2018) was 5.8%. The unemployment rate in Alaska (2018) was 6.6%. Monitoring this indicator is important because unemployment creates financial instability and barriers to access which can include insurance coverage, health services, and healthy foods. Although Active Duty members have consistent employment, family members (Ex: spouse) may not.

Uninsured Population: The lack of health insurance is considered a key driver of health status. This indicator reports the percentage of total civilian non-institutionalized population without health insurance coverage. This indicator is important because lack of health insurance is a primary barrier to healthcare access including regular primary care, specialty care and other health services. Active Duty service members are provided medical insurance to include vision and dental. Family members receive medical insurance, but may also be underinsured (e.g. may not have dental or vision coverage) unless additional plans are purchased.

Educational Attainment: Educational attainment in a community is a critical indicator in population health. There is a growing body of evidence that supports this

phenomenon. First, education has a number of downstream benefits that may lead to improved health, including a higher income, lower odds of being unemployed or having a job that does not provide health insurance, various social and psychological benefits that arise from the social environment at school, and the mental and social skills that are acquired in high school and college. Other downstream benefits include the resources and knowledge to adopt healthier behaviors and the resources to live in healthier neighborhoods (Hahn and Truman, 2015). A community with 94% of residents with a high school diploma or higher serves as a great benefit when working to address public health issues.



Data Sources: 1) US Census Bureau. Alaska State Profile. Retrieved at https://data.census.gov/cedsci/profile?q=0400000US02&q=Alaska

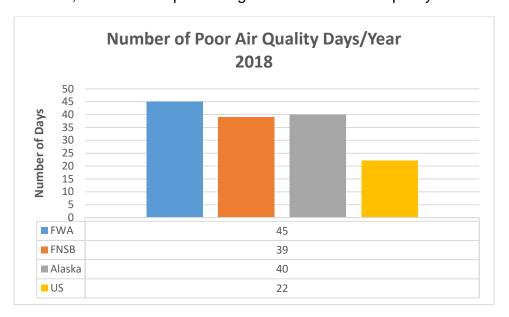
2) US Census Bureau. Small Area Income and Poverty Estimates (SAIPE) Program. 2018 Poverty and Median Household Income Estimates - Counties, States, and National. Retrieved at https://www.census.gov/data/datasets/2018/demo/saipe/2018-state-and-county.html

Physical Enviornment

Air Quality

Although the US continues to have good air quality relative to most of the world, pockets of elevated air pollution persist in densely populated regions and places with concentrated industrial activity. Further, the effects of climate change have begun to exacerbate the frequency and intensity of natural events which can trigger hazardous levels of pollution (Health of the Force, 2018). Air quality is a concern in FNSB. The air

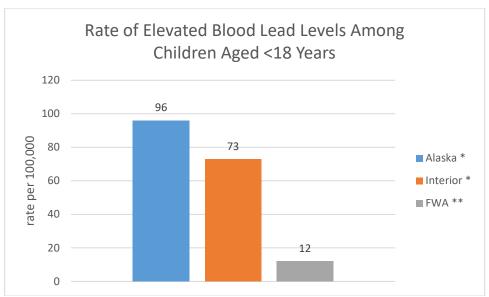
quality in the borough was 78 days of moderate air quality, 29 days were unhealthy for sensitive groups and 10 were unhealthy for all groups out of 365 in 2018 (EPA.gov). According to the Health of the force Report 2018, Fort Wainwright experienced 45 unhealthy days in 2018. The use of wood burning stoves and fireplaces as well as idling cars during the cold contribute to unhealthy air quality in the winter. In the summer, wildfires can pose a significant threat to air quality.



Data Source: 1) Environmental Protection Agency. Outdoor Air Quality. Air Quality Index Report. Retrieved at: https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report.

²⁾ Army Public Health Center. 2018 Health of the Force Report. Retrieved at https://phc.amedd.army.mil/Periodical%20Library/2018%20Health%20of%20the%20Force%20report%20%20web.pdf

Children and Lead



^{*} Data reflects all elevated BLL reports to the Alaska Section of Epidemiology (1995-2012)

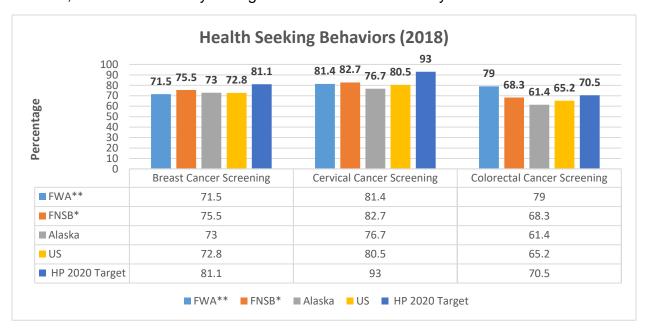
Data Sources: 1) State of Alaska Epidemiology Bulletin. Blood Lead Surveillance in Children Aged <18 Years — Alaska, 1995–2012. Retrieved at http://dhss.alaska.gov/dph/Epi/eph/Documents/bulletins/docs/b2014_04.pdf. 2) MEDDAC-AK Pathology. Reportable Medical Event Monthly Report.

Young children who incur even low levels of lead exposure are at risk for lifelong intellectual and behavioral deficits. In May 2012, the Centers for Disease Control and Prevention (CDC) adopted 5 µg/dL (micrograms per deciliter) as a reference level for blood lead follow-up for children aged 6 years. The Alaska Section of Epidemiology (SOE) follows this standard for all screening results in persons aged <18 years (Alaska.gov). Fort Wainwright DPH follows the screening guidance outlined by the SOE and the Office of the Surgeon General Policy Memo 18-064 (Preventing Childhood Lead Exposure – Lead Hazard Management). With the continued emphasis on home health hazard monitoring, senior leader and community visibility on these data lead hazard control will remain a priority for installation leadership and the public health department.

^{**} Data reflects all elevated BLL reports to the FWA DPH for 2018

CLINICAL CARE

The Ft. Wainwright community provides a number of installation resources that promote a positive impact on mental health, physical health and the quality of life of its community members. The installation is home to one community hospital (Bassett Army Community Hospital) and one Soldier Centered Medical Home (Kamish Health Clinic). Between these two facilities, Soldiers and families assigned to Ft. Wainwright have access to a comprehensive menu of services though the military's TRICARE healthcare benefits. This access greatly enhances our families' ability to access preventive services. Access to preventive health services is a vital tool to improve overall health and reduce premature mortality. Screening tests are done to detect potential health disorders or diseases in people who do not have symptoms of disease. The goal is early detection and lifestyle changes or surveillance to reduce the risk of disease, or to detect it early enough to treat it most effectively.



Data Sources: 1) National Health Interview Survey (NHIS, CDC/NCHS). Retrieved at https://www.healthypeople.gov/2020/data-search/Search-the-Data#topic-area=3513;

2) State of Alaska Health and Social Services Indicator-Based Information System for Public Health (AK-IBIS). Retrieved at http://ibis.dhss.alaska.gov/about/Welcome.html

³⁾ Bassett Army Community Hospital Resource Management Office

^{*}FNSB Breast Cancer data reflects Percentage of women (50-74) who reported having a screening mammogram within the past two years, by behavioral health system assessment reporting regions, all Alaskans, 2010-2018 (5-year average). FNSB Colorectal data reflects percentage of adults who met colorectal cancer screening recommendations, by behavioral health systems assessment reporting regions, all Alaskans, 2014-2018 (3-year average); FNSB Cervical cancer screening data reflects a pap smear completed within past 3 years, women ages 21-65, by behavioral health systems assessment reporting regions, all Alaskans, 2010-2018 (5-year average).

^{**} Ft. Wainwright reflects 2019 data.

Key Findings:

Fort Wainwright preventive screening numbers are higher than the national average for cervical cancer and colon cancer screenings. However, percentages do not meet Healthy People 2020 targets. There is a great opportunity in fostering a stronger collaborative effort between the medical care team, public health and community members in promoting the importance of preventive screenings and assurance of clinical access to get the screenings.

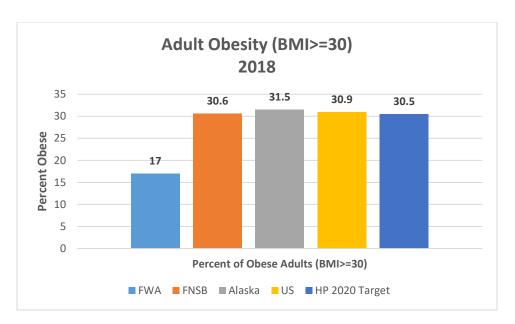
Health Behaviors

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status. The 2019 America's Health Rankings annual report ranks Alaska as number 27 in the nation. This report assesses various metrics related to behaviors, community/environment, policy and clinical care to determine the health of the population.

DoD spends an estimated \$2.1 billion per year for medical care associated with tobacco use (\$564 million), excess weight and obesity (\$1.1 billion), and high alcohol consumption (\$425 million). DoD incurs non-medical costs related to tobacco use, excess weight and obesity, and high alcohol consumption in excess of \$965 million per year.

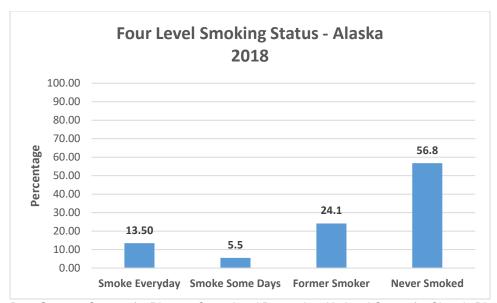
Unhealthy lifestyles contribute to the growing healthcare costs seen in addressing preventable diseases impacting the nation's military personnel, military retirees, and their dependents. The continued rise in healthcare costs could impact other DoD programs and could potentially affect areas related to military capability and readiness (Dall et al, 2007).

Obesity: According to the State of Alaska Health and Social Services Indicator-Based Information System for Public Health (AK-IBIS), Alaska's adult obesity rate is 31.5%. This is an increase from 29.2% in 2010 and 21.1% in 2000. Although most of the Ft. Wainwright population is physically active due to its physical fitness requirements for active duty service, a small percentage of the population (17%) are obese. The extreme winter weather compounds the ability to engage in a physically active lifestyle all year round and could be a contributing factor to the installation and obesity rate.

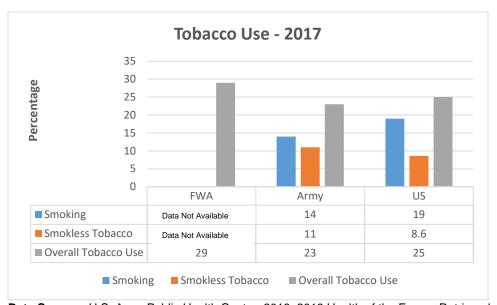


Data Source: 1) State of Alaska Health and Social Services Indicator-Based Information System for Public Health (AK-IBIS). Retrieved at http://ibis.dhss.alaska.gov/about/Welcome.html
2) Army Public Health Center. 2018 Health of the Force Report. Retrieved at https://phc.amedd.army.mil/Periodical%20Library/2018%20Health%20of%20the%20Force%20report%20-%20web.pdf

Tobacco Use: Tobacco use is the leading cause of preventable disease and death in the United States. There have been over 12 million tobacco-related deaths in the United States since the landmark 1964 Surgeon General's report, which broadcast that smoking was a cause of cancer. Exposure to secondhand smoke kills approximately 50,000 Americans every year. The use of tobacco products (both cigarettes and smokeless tobacco products, such as chewing tobacco) is responsible for 30% of all cancer deaths, 21% of all coronary heart disease deaths, and 18% of all stroke deaths. For every one person who dies from tobacco use, another 20 suffer reduced quality of life from tobacco-related illness. In addition, tobacco use costs the US economy more than \$96 billion each year in direct medical expenses and another \$97 billion per year in lost productivity; Alaska's share of these costs are approximately \$839 million annually (Alaska DHSS, 2018).



Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data. Retrieved at https://www.cdc.gov/brfss/brfssprevalence/.



Data Source: U.S. Army Public Health Center. 2018. 2018 Health of the Force. Retrieved at https://phc.amedd.army.mil/topics/campaigns/hof

Key Findings: The 2018 Health of the Force Report shows that Fort Wainwright ranks about the same as the Army average on the overall Installation Health Index Score. Slightly below Army average for reported BH issues, sleep disorders, obesity, and chronic disease, but above Army average in substance abuse disorders and tobacco use (both modifiable risk factors). Along with increased exposure to poor air quality. No

difference compared to Army with sleep and physical activity portions of Performance Triad, but apparently poorer dietary habits.

Social and Personal Responsibility (Sexually Transmitted Infections)

Chlamydia trachomatis infection (CT) is the most common reportable infectious disease in the United States and the Army. Between 2010–2018, Alaska has had the highest CT infection rate in the nation (DHSS, 2019). The rate of reported Gonorrhea cases has increased by 75% nationally since 2009. Alaska has been experiencing a Gonorrhea outbreak since October 2017. In 2017, Alaska's Gonorrhea rate was the second highest in the nation.

Figure 3. Chlamydia Infection Rates, by Region — Alaska, 2017 and 2018

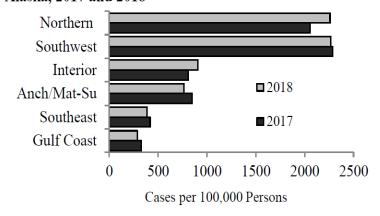
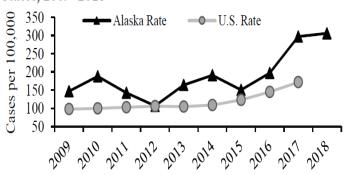


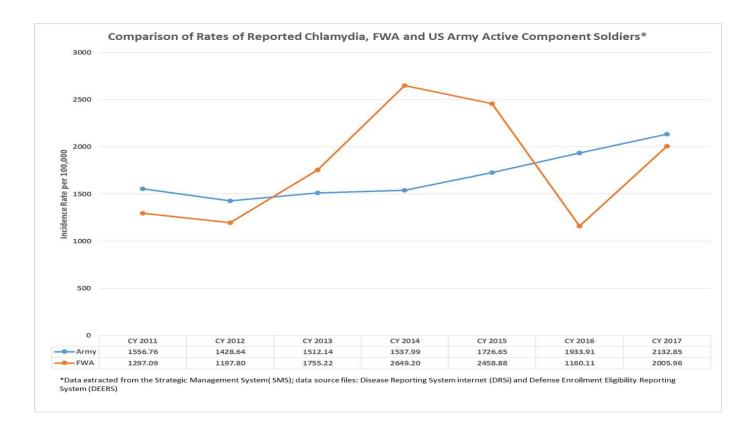
Figure. Gonorrhea Rate by Year — Alaska and the United States, 2009–2018*



*Note: the 2018 U.S. rate is not yet available.

Data Source: Alaska DHSS 2019

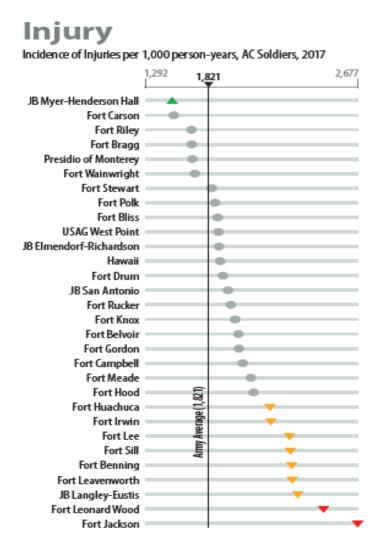
Fort Wainwright contributes to the state's STI rates as described in previous Health of the Force Reports. The 2015 report ranked Fort Wainwright as 3rd highest for chlamydia incidence and in the 2016 report, Fort Wainwright was ranked 12th among Army installations. The majority of infections were in patients ages 25 and younger (66%), with forty-three percent of infections occurring in females. Sixty-nine percent of positive reports were confirmed in active duty personnel.



Key Findings: About half of the Fort Wainwright active duty population is under the age of 25. This same population group is also at highest risk for STIs within the general US population. The community also has greater access to medical screening, which increases the likelihood for detection. Because of this demographic, a multi-pronged approach should be taken that encompasses proper access to services within the military treatment facility in addition to creating and sustaining an environment conducive for Soldiers to make healthy sexual decisions. This done by fostering leader emphasis in healthy sexual behavior, eliminating barriers to healthcare services, and by integrating opportunities for community outreach and health risk communication across various Soldier and family member touch points.

Unintentional Injuries

According to the 2018 Health of the Force report, Fort Wainwright is below the Army average for injury incidence for Active Duty and Top 6 overall.



Army Public Health Center Military Injury Data Highlights for Fort Wainwright

- In 2017, the most frequent injury diagnoses were for pain.
- Cumulative musculoskeletal (MSK) injuries (pain, strains, and stress fractures) accounted for 64% of injuries at Wainwright in 2017.
- Acute mechanical injuries represented a greater proportion of all injuries compared to the overall Army.
- Top injury types: MSK tissue damage (70%), Sprain/Joint damage (6%), and Tissue damage other (6%).

- Most injuries were to the lower extremities (44%) and upper extremities (23%).
- Similar patterns were seen for males and females.
- There were over 900 medical encounters in 2017 among Wainwright Soldiers for conditions that are likely related to prior injury.

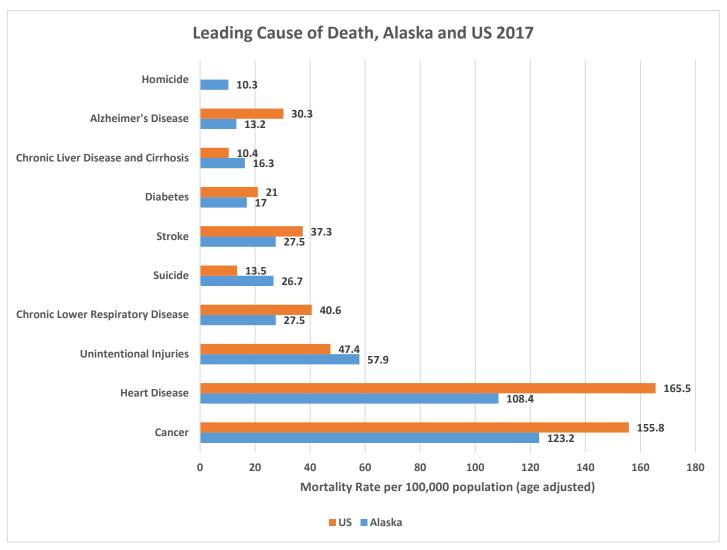
Key Findings: MSK injuries are the leading threat to readiness. On a positive note, FWA is below the Army average for injury incidence and #6 overall amongst all Army installations. Quarterly injury rates at FWA have been declining/improving since 2018, and they have been trending below historical means. At FWA, cumulative (chronic) overuse injuries affecting the lower extremity are the number one injury type. Physical training is the leading cause of these injuries. Several key MSK injury risk factors have been identified (i.e. poor aerobic fitness as defined by slower 2-mile run times, physical inactivity, overuse, age 35+, female gender, tobacco use, and obesity). Most of these are modifiable. At FWA specifically, there is a higher prevalence (compared to all Army) of the following risk factors: tobacco use, substance abuse and poor dietary habits. Lastly, many (900) ambulatory medical encounters were linked to prior injuries.

2019 Army Public Health Center Epidemiological Consultation (EPICON) Findings:

- From January 2014 through March 2019, 11 suicides were identified. Observed findings were consistent with suicide cases in previous EPICONs. Soldiers who died by suicide had indications of multiple risk factors, these included pain, sleep, and relationship issues.
- Soldiers identified isolation, stigma, limited resources, poor coping skills, alcohol
 use, and poor quality of life at FWA as factors they perceived as contributing to
 suicidal behavior.
- Roughly one-third (34%) of Soldiers reported poor sleep quality in the week prior to taking the survey.
- Soldiers expressed concerns with lack of easy access to high quality, nutritious, and affordable food options.
- Driving under the influence was the most prevalent type of Serious Incident Report (SIR).
- Soldiers reported that Family members were the most important source of support for Soldiers, but work-life imbalance strained these relationships.
- Hazardous drinking was reported by 22% of Soldiers; 26% of Soldiers reported that their peers view hazardous drinking as acceptable, and 34% of Soldiers reported that leadership tolerates hazardous drinking off-duty. Alcohol or drugs were contributing factors in most FWA SIRs.

Data Source: Army Public Health Center Technical Report No. S.0065762.3-19, October 2019

Leading Causes of Death



Data Source: State of Alaska Health and Social Services Indicator-Based Information System for Public Health (AK-IBIS). Retrieved at http://ibis.dhss.alaska.gov/about/Welcome.html

Key Findings: Heart disease and cancer have been the leading causes of death for many decades, both in Alaska and in the U.S. nationwide. Over the last 40 years, heart disease mortality rates have been steadily declining. Cancer rates peaked in 1991 for the U.S. and Alaska peaked in 1993, and have been steadily declining since then in both areas. For the U.S., the rate for heart disease is now just slightly higher than for cancer. Heart disease mortality rates for Alaska have consistently been lower than those for the U.S. over the last 40 years. Cancer mortality rates for Alaska have tended to fluctuate relative to U.S. rates but have always followed the US trend. In 2017, Alaska's cancer mortality rate (123.2 per 100,000) was lower than that of the U.S. (155.8 per 100,000).

The third leading cause of death in Alaska results from unintentional injury. Alaska's 2017 unintentional injury mortality rate of 57.9 per 100,000 was higher than the U.S. rate of 47.4 per 100,000.5

Alaska had one of the highest suicide rates in the U.S. at 26.7 per 100,000 in 2017, nearly twice the national rate of 13.5 per 100,000.

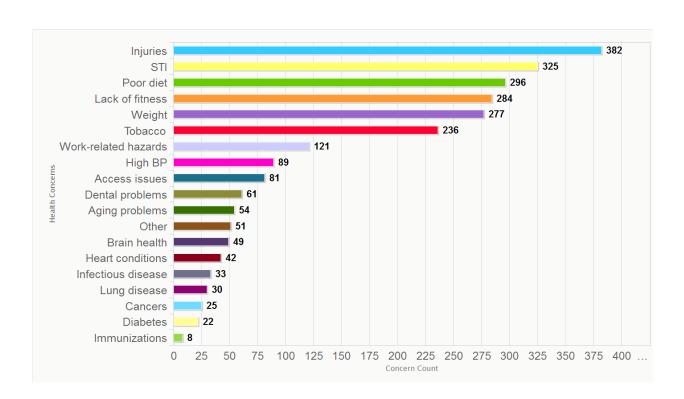
COMMUNITY STRENGTHS AND THEMES ASSESSMENT

FY 18 Results

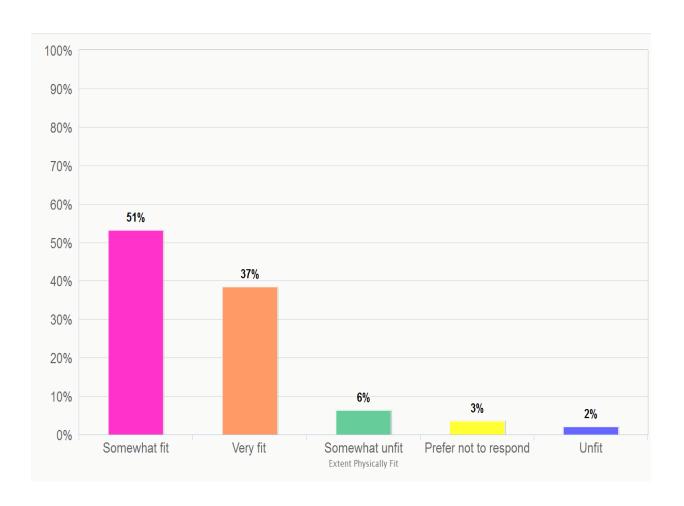
The Community Strengths and Themes Assessment (CSTA) tool is designed to provide a deeper understanding of issues that relate to the community members' perceptions of quality life, health, safety, and satisfaction within the environment of an Army installation. Information from the assessment helps to inform the Commander's Ready and Resilient Council (CR2C) on priorities that community members want to address. The CSTA is administered every two years to service members, military retirees, family members, civilian employees, retired civilian employees, and federal contractors. The sample size of completed surveys at Fort Wainwright was 735 which were collected between March and June 2018.

Physical Health

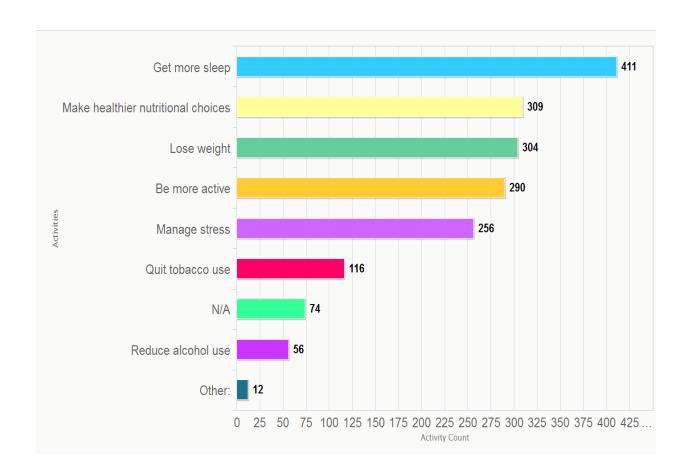
What do you think are the top physical health-related concerns that affect our installation?



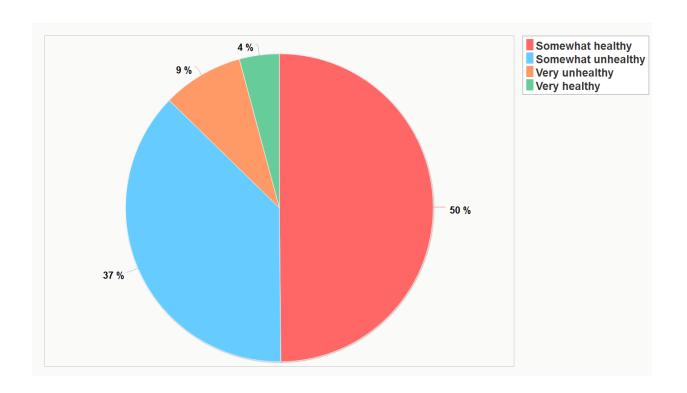
To what extent do you feel that you are physically fit?



Of the following, what are some activities you want to do to improve your health?

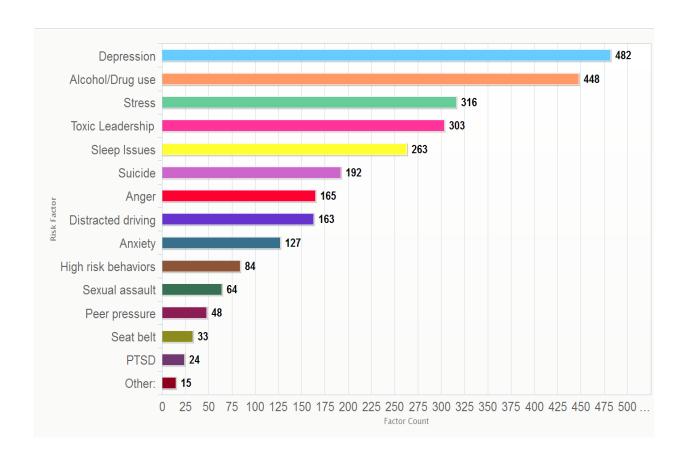


Which of the following best characterizes your perceptions of the people on our installation?

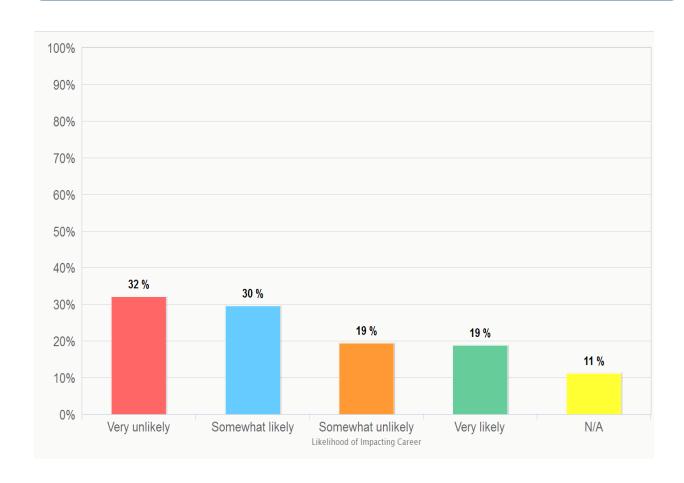


Behavioral and Emotional Health

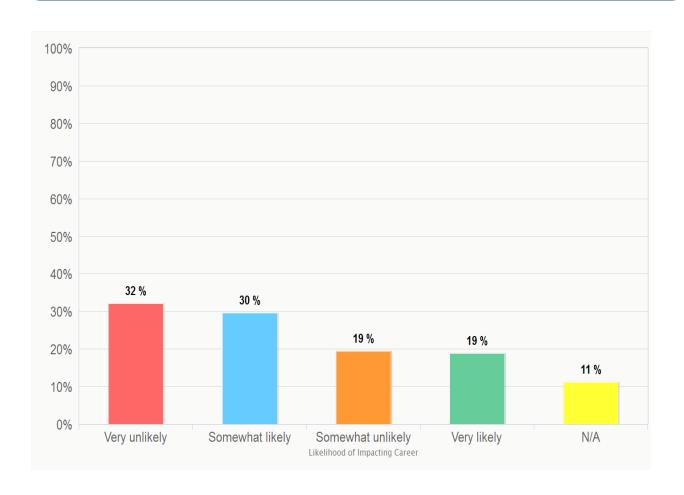
What behavioral or emotional risk factors do you think cause the most concern in our installation?



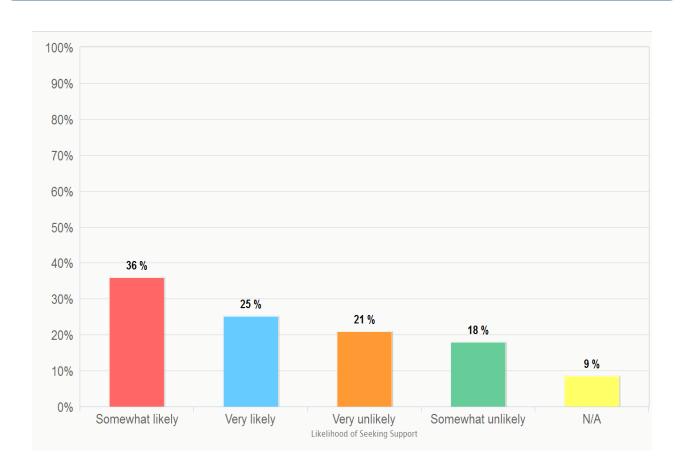
In your opinion, how likely would seeking help for a behavioral or emotional concern negatively impact your career?



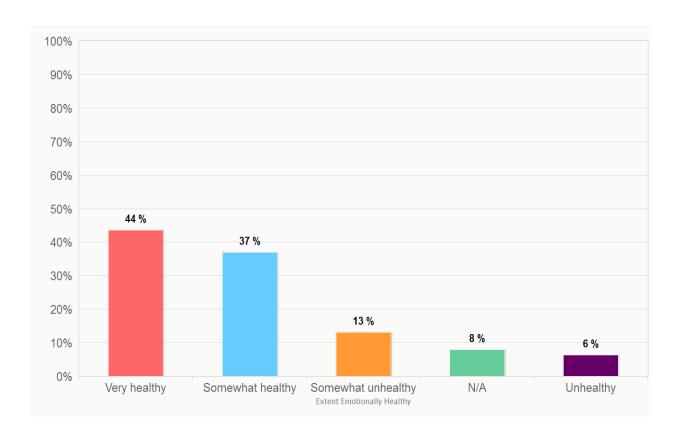
In your opinion, how likely would seeking help for a behavioral or emotional concern negatively impact your career?



If you or a family member were experiencing a life challenge, how likely would you be to seek support on our installation?

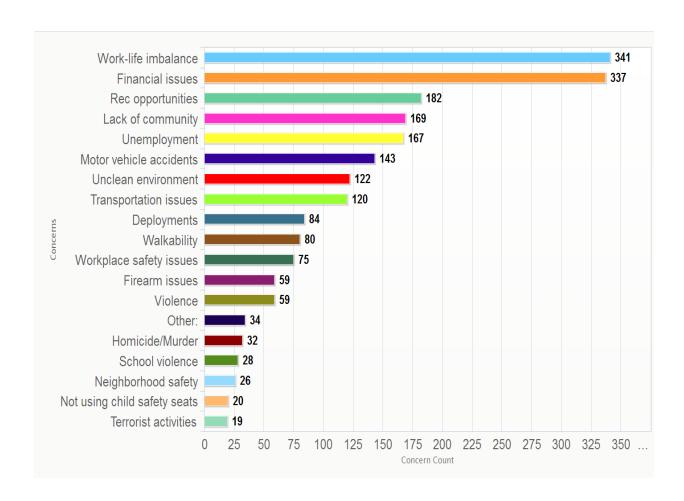


To what extent do you feel that you are behaviorally or emotionally healthy?

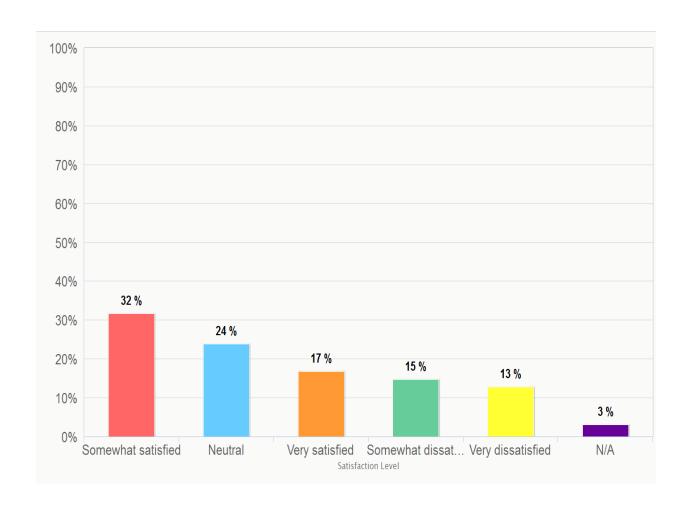


Social and Environmental Health

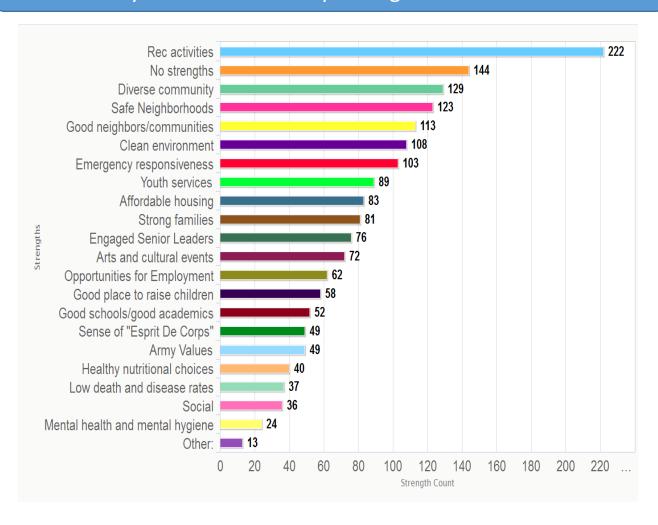
What do you think are the top five Social and Environmental Health-related concerns for our installation?



How satisfied are you with your direct (professional) working relationships on our installation?

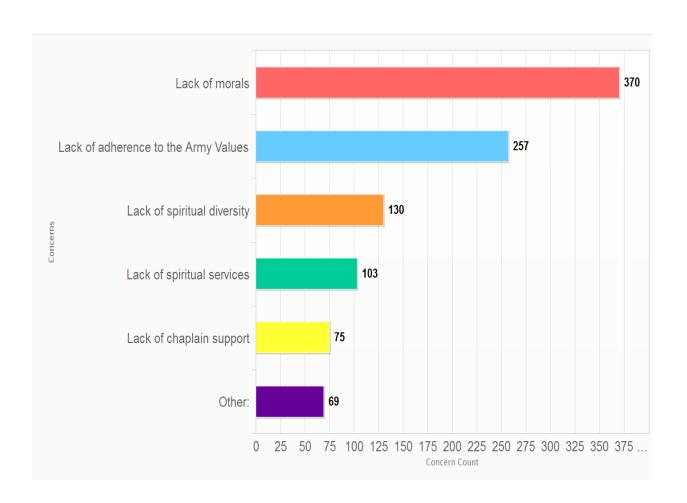


What do you think are the top strengths of our installation?

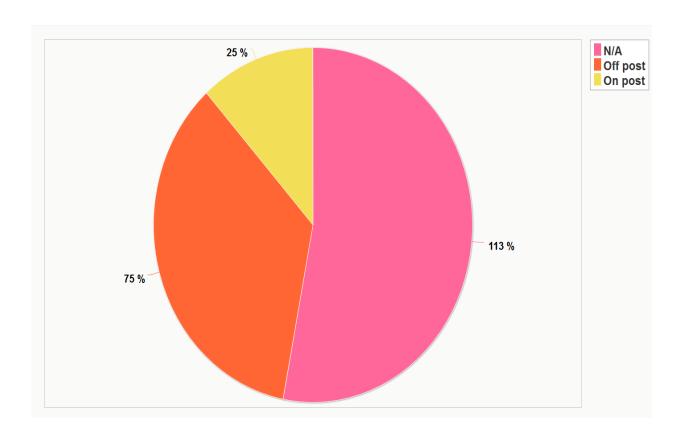


Spiritual Health

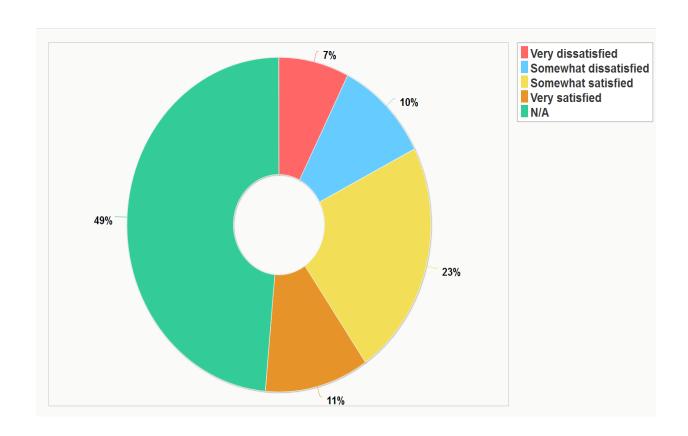
What do you think are the top Spiritual Health-related concerns for our installation?



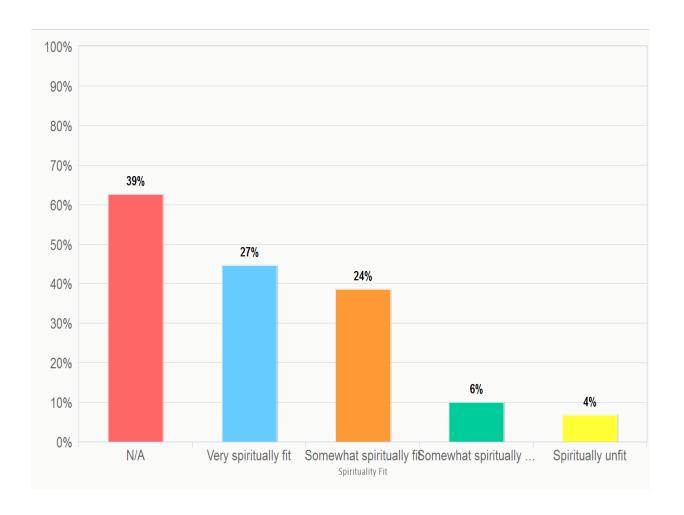
Where do you find spiritual support?



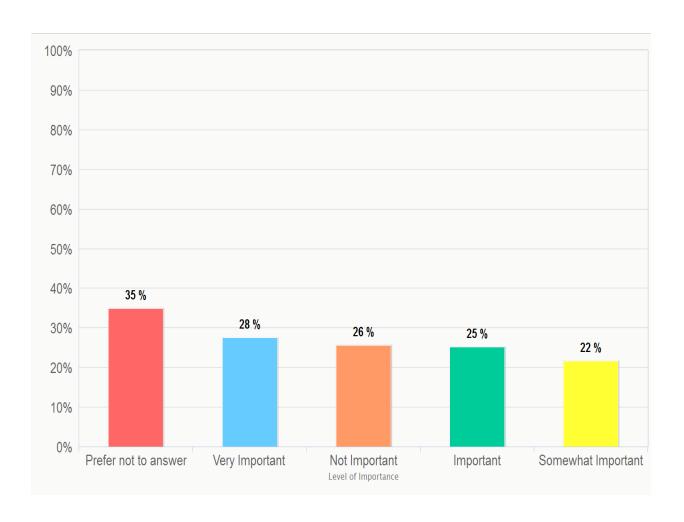
How satisfied are you that your spiritual needs are being met in our installation?



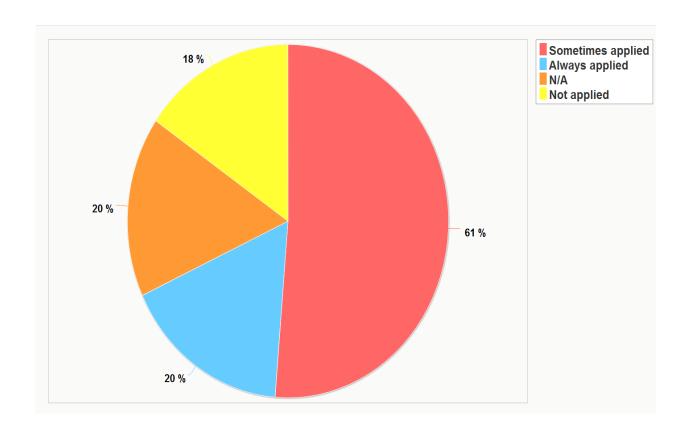
To what extent do you feel that you are spiritually fit or resilient?



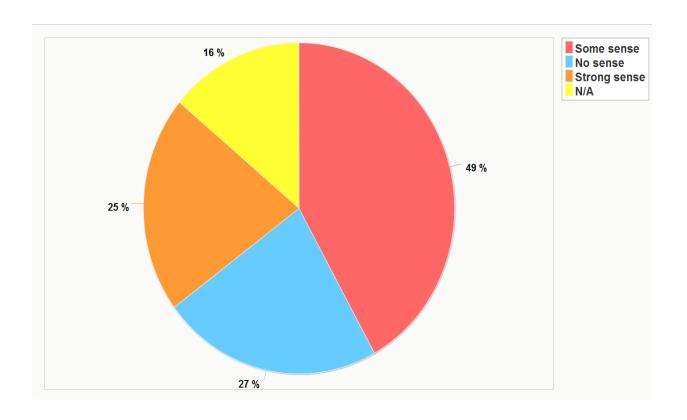
How important do you consider participation in religious/faith based activities for your personal resilience?



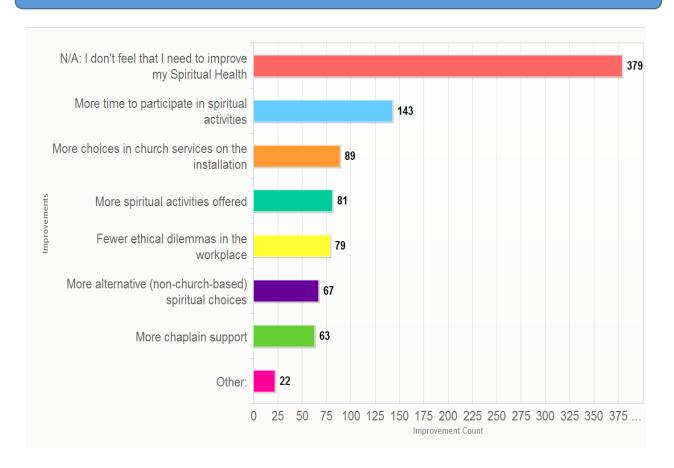
To what extent do you feel that people and organizations on our installation apply the Army Values?



To what extent do you feel a sense of purpose in our installation?

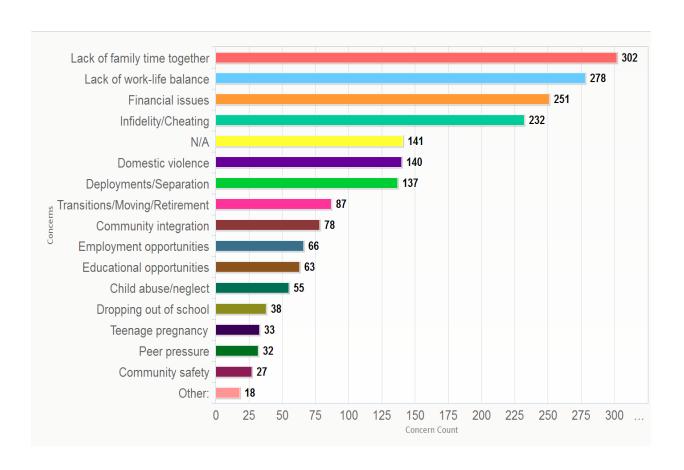


What would most help to improve your Spiritual Health?

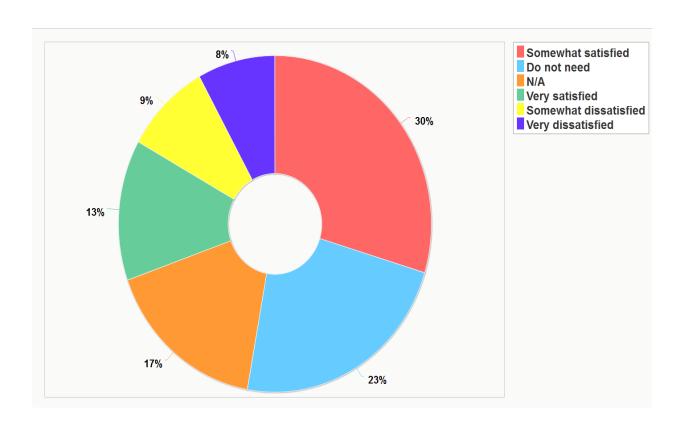


Family Health

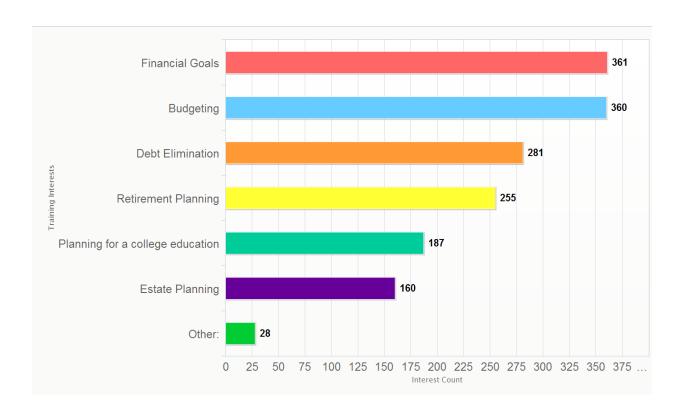
What do you think are the top Family Health-related concerns in our installation?



How satisfied are you with the support available in our community to assist with a financial setback?

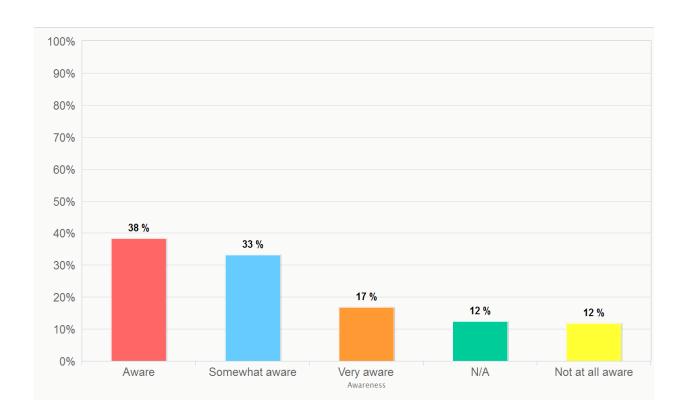


What type of financial training or education would interest you?

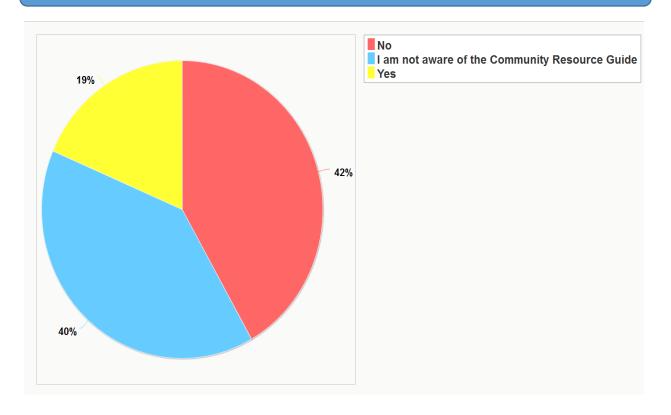


Programs and Services

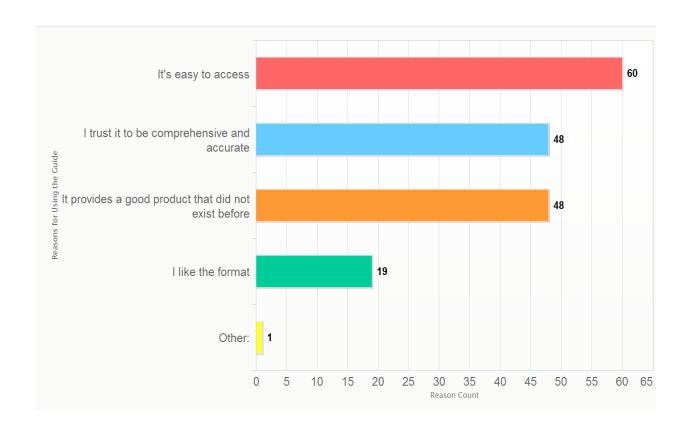
To what extent are you aware of programs and services on our installation?



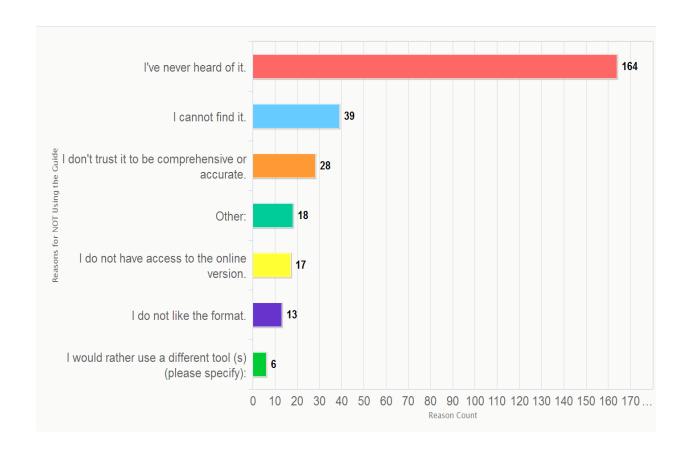
Do you use the Community Resource Guide?



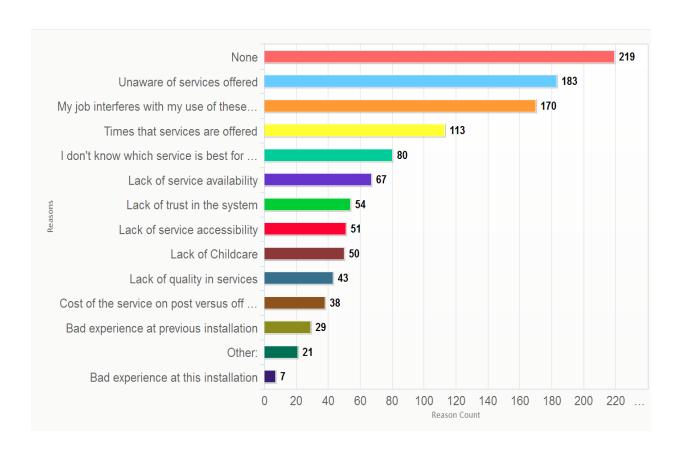
Why do you use the Community Resource Guide?



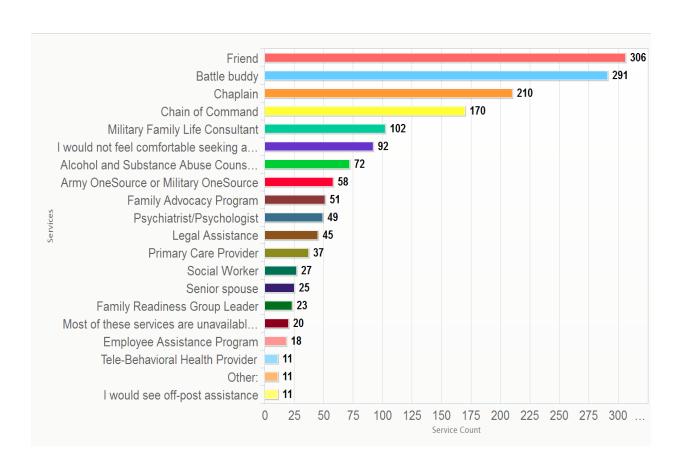
Why do you not use the Community Resource Guide?



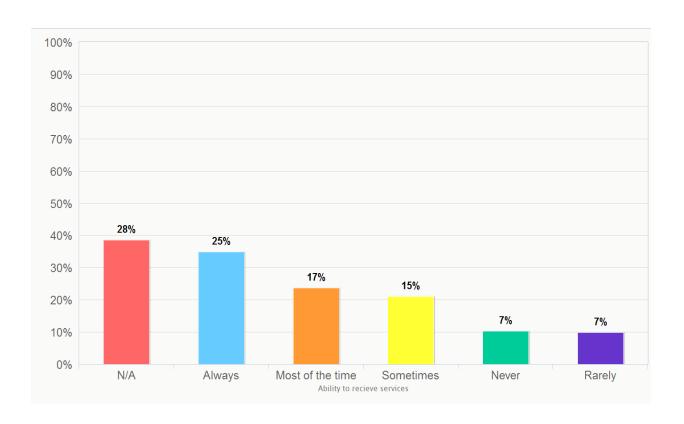
What are some reasons you do not access or use programs and services on this installation?



If you had a problem that you wanted to talk to someone about, which service(s) would you feel most comfortable contacting?



In the past year, I was able to receive the health services I needed.



Key Findings: The community strength and themes assessment revealed that the overall feeling of the participants was community members were satisfied with their emotional and physical well-being as a whole, but identified areas of improvement. Concerns raised were about injuries, lack of sleep, eating right and losing weight. Money concerns and financial solvency issues were also raised and an interest in classes for budgeting and money management.

An overarching theme was noted in many of the areas of the assessment - mental health concerns and the stigma that goes with them. Many of the respondents noted that depression, alcohol/drug use, stress, toxic leadership, work/life balance and how it would negatively impact their career are reason why they do not seek help for their mental health needs. Only 25% of respondents reported that they were able to make appointments with the appropriate care provider.

	PHRIC	HEAI TH	CYCTEM	ASSESSMENT
LUCAL	FUBLIC		JIJIEIVI	AUGLUGIVIEIVI

The 10 Essential Public Health Services (EPHS) have been identified as being foundational for what a public health system should deliver to all communities. The Local Public Health System Assessment (LPHSA) provides an opportunity for public health partners to assess how effective they are at delivering the 10 Essential Public Health Services to their community. Following the assessment, the public health team is able to identify strengths and areas of improvement regarding the 10 Essential Public Health Services.

According to Army Public Health Center, a standardized approach to conducting an LPHSA for an Army installation community is yet to be established. Many local and state health departments in the civilian sector use the LPHSA Instrument provided by the Centers for Disease Control and Prevention (CDC), the National Public Health Performance Standards. For Fort Wainwright, the team used a survey to ask members of the Physical Health Working Group to assess how well the 10 Essential Public Health Services are being delivered at Fort Wainwright. The group included those from Industrial Hygiene, Army Public Health Nursing, Occupational Health, Army Wellness Center, Physical Therapy, and 1-25 SBCT. The survey was conducted in April 2019.

The below rating system was provided to the survey participants to note how well the Essential Public Health Services are being provided for the Fort Wainwright community.

Local Public Health System	Assessment Rating	System
----------------------------	-------------------	--------

Rating System	Percentage Score	Scale
Don't Know/Not Aware	No percentage score	N/A
No activity	0%	1
Minimal Activity	Between 0% and 25%	2
Moderate Activity	Between 26% and 50%	3
Significant Activity	Between 51% and 75%	4
Optimal Activity	Between 76% and 100%	5

The below chart summarizes the average activity rating assessed for each Essential Public Health Service.

Local Public Health System Assessment Survey Results

Essential Public Health Services	Score	Activity Rating
Monitor health status to identify community health problems	3.2	Moderate
Diagnose and investigate health problems and health hazards.	3	Moderate
 Inform, educate, and empower individuals and communities about health issues. 	3.3	Moderate
 Mobilize community partnerships to identify and solve health problems. 	3.1	Moderate
Develop policies and plans that support individual and community health efforts.	2.3	Minimal
Enforce laws and regulations that protect health and ensure safety.	1.7	No Activity
7. Link people to needed personnel and health services and assure provision of health care when otherwise unavailable.	3	Moderate
Assures a competent public and personal health care workforce.	3.2	Moderate
 Evaluate the effectiveness, accessibility, and quality of personal and population-based health services. 	1.2	No Activity
10. Research for new insights and innovative solutions to health problems.	1.4	No Activity
Overall Performance Score	2.54	Minimal

Feedback Provided for Essential Public Health Service Ratings

Survey participants were asked to provide feedback regarding the rating they gave for each Essential Public Health Service. The below provides an example of staff/stakeholder feedback related to each of the Essential Public Health Services.

EPHS #1:

- Fort Wainwright currently publishes a bi-weekly PH surveillance report, Industrial Hygiene and Environmental Health surveys, and the Community Health Status Assessment.
- I don't have enough knowledge of the process to answer this question accurately.

EPHS #2:

- Industrial Hygiene surveys and controls and Army Public Health Nurses conduct contact interviews as needed.
- Relationships with the ER staff and North Haven have increased over the years however some things can be missed or Army Public Health Nursing is second thought.
- Very strong Industrial Hygiene team. Also medical providers are very proactive in getting Public Health involved when managing Public Health events.

EPHS #3:

- Fort Wainwright demonstrates community engagement through public health newspaper articles, Artic Health Link fairs/events, Exceptional Family Member Program (EFMP) events, and Facebook.
- Education is provided at every encounter. Many partnerships have been established but do lack social marketing which is improving.
- We offer lots of classes and go to the customer, but not everyone in the community takes advantage of this.

EPHS # 4:

- We work a lot with the installation, Fairbanks Public Health Department, and Eielson Air Force Base.
- I think we do the best we can since some stakeholders won't always share information.

EPHS #5:

- Lots of engagement but could improve through policy generation and synchronization.
- Tobacco free medical campus and STI policy.
- We recently made a big push toward policy development and are held accountable.

EPHS #6:

- This just takes time for regulations and laws to change. We could probably do more if the process was faster.
- Near impossible to enforce without violating people's freedom to choose what they do with their own times and bodies.
- This is difficult to achieve but try to encourage people to do the right thing.

EPHS #7:

 Moderate as I know that if the service is not offered here at Fort Wainwright that the personnel is referred out to the community.

- Barriers for care are identified and adjusted for either care travels to patient or adjustments to schedule are made for client.
- Good collaboration with MEDDAC, Fairbanks Memorial Hospital, medical facilities at Anchorage and JBLM.

EPHS #8:

- Frequent encouragement but difficulty with accountability.
- MEDDAC-AK training days, competency assessments, and Public Health accreditation.
- Constant and consistent evaluations are conducted.

EPHS #9:

- Frequent, comprehensive data collection and assessment.
- Very difficult to establish solid metrics.
- The Health Department has great staff for this but they are spread pretty thin.

EPHS #10:

- Significant barriers and lack of personnel to conduct official, full-scale research.
- More could be done regarding research for new insights and innovation for solution. The PHWG does what it can and utilizes resources but time and budget are limiting factors.
- MEDDAC-AK does but unsure about post wide.

Analysis of Local Public Health System Assessment Results

The average score for the Fort Wainwright local public health system was 2.54 out of 5 points available. From the rating scale, this suggests that survey participants assess observe Essential Public Health Services being provided to the Fort Wainwright community with minimal to moderate activity. The Essential Public Health Service with the highest rating was number three (inform, educate, and empower individuals and communities about health issues) with a rating of 3.3. Other EPHS' with higher ratings were number one (monitor health status to identify community health problems), eight (assures a competent public and personal health care workforce) and four (mobilize community partnerships to identify and solve health problems.) In summary, the survey participants feel that the Fort Wainwright Public Health System keeps the community informed, conducts adequate community health assessment, ensures a competent health care workforce and maintains strong community health partnerships.

The lowest assessment ratings included numbers six (enforce laws and regulations that protect health and ensure safety), nine (evaluate the effectiveness, accessibility, and quality of personal and population-based health services) and ten (research for new insights and innovative solutions to health problems.) Based on summary results, the

Fort Wainwright Public Health Department has room for improvement in the areas of public health regulatory enforcement, evaluating health-system effectiveness and involvement in public health research.

The Pubic Health department has identified factors that impact the health department's ability to be fully engaged in EPHS Six (enforce laws and regulations that protect health and ensure safety). Factors include: 1) Public health system's ability to succeed are Command support and buy-in; 2) Command turn-over which results in a re-prioritization of Senior Leader public health goals; and 3) Community buy-in and readiness for behavior change. Potential courses of action to improve in this area include utilizing the CR2C Physical Health Working Group as a platform for identifying health concerns and elevating regulatory needs to the Senior Mission Commander. Civilian continuity in the Physical Health Working Group will be crucial to continue progress on initiatives. Two examples of success related to this EPHS include the signing of the MEDDAC-Alaska Tobacco Free Medical Campus in 2017 and the signing of a targeted STI screening policy for USARAK Active Duty Soldiers ages 17-24.

To make improvements with EPHS Nine (evaluate the effectiveness, accessibility, and quality of personal and population-based health services) assistance will be needed from Army Public Health Center in developing appropriate metrics for evaluating health delivery across Ft. Wainwright. The Public Health Accreditation process will move the Public Health Department in the right direction in metric development and performance evaluation.

It is difficult to become fully engaged in EPHS ten (research for new insights and innovative solutions to health problems). MEDDAC-AK does not have a Graduate Medical Education program nor dedicated research capabilities. Research opportunities would be supported through reach back to Madigan Army Medical Center. The currently staffing at the Public Health Department is not conducive to introducing formal research at this time.

FORCES OF CHANGE ASSESSMENT

The table below details the most influential and prominent forces in Fort Wainwright with the associated threats and opportunities. Forces were identified by the US Army Alaska Physical Health Working Group (PHWG). The PHWG met in Dec 2019 to help build this assessment. A brainstorming session and discussion were held to review important forces as well as the threats and opportunities associated with each force. Each member was asked to identify between one to three forces that he or she believes will most impact the health of the Fort Wainwright community its public health system. Responses were collected and included in this table. The forces identified here and the results of the other included assessments will serve as the foundation for recommendations to inform the CHIP.

Forces	Threats Posed	Opportunities Created
	Economic	
Cost of Living in Alaska	Soldiers unable to properly manage daily financial requirements.	1) Leverage/strengthen agency partnerships to educate on financial literacy. 2) Encourage participation in AD surveys/input to influence cost of living allowance in Alaska.
Funding constraints for agencies on Installation	Less money available for direct services and prevention programs.	1) Leverage MOU/MOAs to shift programs to private sector or other on post agencies 2) Streamline services and decrease wasteful spending.
	Environmental	
Pollution and Environmental Degradation	Pollutants can cause a variety of respiratory, neurological health problems and increase cancer risk.	Clean and redesign public spaces, facilities and parks.
Built Environment	Lack of adequate housing for Soldier population.	Develop safe housing with spaces for community engagement to encourage community interaction.
	Lack of affordable transportation options for Soldiers and Families	Develop an internal installation program to improve options.
	Lack of well-designed indoor spaces for recreation.	Assess opportunities to repurpose existing installation space for indoor recreation.
	Legal	
Regulatory Requirements	Difficult to stay abreast of and communicate changes in a timely fashion.	Opportunity to educate stakeholders on requirements and foster collaborations to ensure compliance.
	Political	

Command Priorities	Misalignment of priorities based on Command influence and not driven by data.	Leverage CR2C and other leader platforms to share current public health data to influence priority development.
	Scientific	
Advances in Medical Care	Increase in medical care	Improved health care
	costs. Increase in demand for	services and treatment. Better Health Care Outcome.
	medical care services.	Better Health Care Outcome.
	Social	
Education and Health Workforce Training	Shortage of trained health professionals.	Partner with local and out-of- state professional health schools.
	Poor outcomes related to lack of education.	Leverage online military and civilian training opportunities to enhance workforce training.
0.6.0		2) Improve health education services to lay population.
Safe Communities and Mental Health Services	Increased demand on mental health services and social support systems.	Leverage existing installation infrastructure and processes to promote safe community initiatives.
	Increase in Serious Incident Report (SIR) related to negative coping due to various stressors.	Expand menu of mental health capabilities to address underlying mental health factors (Ex: sleep, pain).
	Technological	
Information Technology	Increase in chance of misinformation due to limited reach.	Improve ability to communicate with larger audience.
	People ignore important health communication messages.	Improve communication between health professionals and within the health system to reinforce messages.
	Overflow of information on the internet makes it difficult to filter through fact and fiction.	Partner with community groups and professionals to provide valid and credible messages.

Community Assets and Resources

Below is a list of the various installation and local community resources available to assist community members and the Ft. Wainwright Public Health Department in assuring the delivery of the 10 Essential Public Health Services. Soldiers and families are made aware of resources though direct communication with the Ft. Wainwright Public Health Department, interactions with staff in outreach events and community forums. In addition, resources are marketed though all forms of media (print, digital platforms and social media).

Community Resources (Installation and Local Community)
Bassett Army Community Hospital
Army Community Services
Army Substance Abuse Program
Installation Directorates (DPW, DES)
Better Opportunities for Single Soldiers (BOSS)
Careline Crisis Helpline
Military and Family Life Counseling program (MFLC)
Sexual Harassment and Assault Response Prevention (SHARP)
American Red Cross
Army Education Center
Employment Readiness Program (ERP)
Military Spouse Employment Partnership Program
Fairbanks VA Community Based Outpatient Clinic
Child, Youth and School Services
Women, Infants and Children (WIC)
School Support Services/School Liaison Officer
Army Family Team Building
United Service Organizations (USO) Alaska, Ft. Wainwright
Interior Alaska Center for Non-Violent Living
Emergency Food Assistance
Army Emergency Relief
Fairbanks Wellness Coalition
Fairbanks Rescue Mission
Army Wellness Center
Exceptional Family Member Program (EFMP)
Fairbanks VA Community Based Outpatient Clinic
Family and Morale, Welfare and Recreation (MWR)
Automotive Skills Center
Physical Fitness Center
Melaven Gym
Fort Wainwright Library

Fort Wainwright Outdoor Recreation
Northern Light Chapel
Interior Public Health Partners
Fairbanks Wellness Coalition
Fairbanks Public Health Center
Eielson Air Force Base Public Health

Recommended Focus Areas for Community Health Improvement Plan

Based on key findings identified throughout this assessment, it is recommended that the community health improvement plan focus on the following areas:

- Initiatives that focus on modifiable risk factors that facilitate a reduction in musculoskeletal injuries and other preventable diseases.
 - overuse/training parameters to reduce risk of cumulative lower extremity injury (this has been done through USARAK policy spearheaded by brigade physical therapy)
 - Performance Triad namely the Nutrition element
 - Promote Army Wellness Center utilization: BMI management, dietary counseling, aerobic fitness improvement programs, and tobacco cessation
 - Prevention of re-injury through leader education and proper exercise progressions for Soldiers going through Injury and Rehabilitation Physical Training.
- Explore efforts to reduce incidence of driving under the influence of drugs and alcohol.
- Expand promotion of and access to community resources that support the wellbeing of individuals and the community at large.
- Promote the importance of Social and Personal Responsibility among the high risk Soldier population.
- Develop and implement a comprehensive education campaign plan to address stressors commonly associated with behavioral and social outcomes.
 - Sleep hygiene
 - o Pain management care and services
 - Alcohol use and misuse
 - Help-seeking for BH and relationship problems
 - Stigma regarding the use of BH care and services
 - Financial readiness

Acknowledgements

There were many hands involved in the development of this assessment which will guide health and quality of life improvements across the installation. We are tremendously thankful for the various stakeholders that offered their time and expertise in putting this product together. We would like to take this time to recognize those that continue to support the Ft. Wainwright Department of Public Health in its efforts to improve health and quality of life for the Arctic Warrior Family.

Alaska Department of Health and Social Services / Division of Public Health Fort Wainwright Department of Public Health Staff

Bassett Army Community Hospital

USAG Alaska Installation Management Command Directorates

US Army Alaska Community Ready and Resilient Integrators

US Army Alaska Physical Health Working Group

References and Data Sources

Army Public Health Center. 2018 Health of the Force Report. Retrieved at https://phc.amedd.army.mil/Periodical%20Library/2018%20Health%20of%20the%20Force%20report%20-%20web.pdf

Army Public Health Center Technical Report No. S.0065762.3-19, October 2019

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data. Retrieved at https://www.cdc.gov/brfss/brfssprevalence/.

Environmental Protection Agency. Outdoor Air Quality. Air Quality Index Report. Retrieved at: https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report.

Fort Wainwright/USARAK North Equal Opportunity Office; Electronic Military Personnel Office Data; Retrieved Dec 2019

National Health Interview Survey (NHIS, CDC/NCHS). Retrieved athttps://www.healthypeople.gov/2020/data-search/Search-the-Data#topic-area=3513

State of Alaska Health and Social Services Indicator-Based Information System for Public Health (AK-IBIS). Retrieved at http://ibis.dhss.alaska.gov/about/Welcome.html

State of Alaska Health and Social Services. Alaska Tobacco Control and Prevention Program FY 18 Annual Report. Retrieved at http://dhss.alaska.gov/dph/Chronic/Documents/Tobacco/PDF/TobaccoARFY18.pdf

State of Alaska Epidemiology Bulletin. Chlamydia Infection Update — Alaska, 2018. Retrieved at http://www.epi.alaska.gov/bulletins/docs/b2019_08.pdf

State of Alaska Epidemiology Bulletin. Gonorrhea Update — Alaska, 2018. Retrieved at http://epibulletins.dhss.alaska.gov/Document/Display?DocumentId=2023

State of Alaska Epidemiology Bulletin. Blood Lead Surveillance in Children Aged <18 Years —Alaska, 1995–2012. Retrieved at http://dhss.alaska.gov/dph/Epi/eph/Documents/bulletins/docs/b2014_04.pdf.

US Army Alaska G-1 Personnel Office. USARAK Demographic Data, Jul 2019.

US Army Medical Department Activity-Alaska Pathology Department. Reportable Medical Event Monthly Report.

US Census Bureau. 2018 American Community Survey 1-Year Estimates. Retrieved at: https://www.census.gov/programs-surveys/acs/

US Census Bureau. Alaska State Profile. Retrieved at https://data.census.gov/cedsci/profile?g=0400000US02&q=Alaska

US Census Bureau. Small Area Income and Poverty Estimates (SAIPE) Program. 2018 Poverty and Median Household Income Estimates - Counties, States, and National. Retrieved at https://www.census.gov/data/datasets/2018/demo/saipe/2018-state-and-county.html