2018 CALLIS OF THE ARNG CORRES COR

Create a healthier force for tomorrow.







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Total Health, Total Readiness



Timothy J. Kadavy Lieutenant General, US Army Director, Army National Guard

Individual Soldier medical readiness is critical to building and maintaining the Army National Guard as an operational force that is warfighting-capable and governor-responsive. As part of the U.S. Army Public Health Center's ongoing *Health of the Force* series, the 2018 *Health of the ARNG Force* report highlights key ARNG health metrics about our Soldiers. Understanding these statistics allows us to know what we're doing well and where we need to focus to achieve Total Health, Total Readiness.

The 2018 *Health of the ARNG Force* report focuses on important preventive health and behavioral indicators that enable our leaders to develop a better understanding of the factors affecting operational and medical readiness in the Army National Guard. The ability to recognize and mitigate those significant factors will positively impact the readiness of our Soldiers and units. This report showcases how individual Soldier health readiness serves as the foundation for combat readiness.

As Citizen Soldiers, our personnel live and work in every aspect of their communities. The ARNG must be ready when called upon to defend our nation both at home and abroad. As leaders, we must continue to maintain our physical and mental fitness. Maximum readiness means increased attendance at annual training, attendance at schools, promotion, career progression impacts, increased retention rates, lower costs associated with disabilities, and better health for the ARNG community as a whole. Let us go "All In" for medical readiness!

I challenge our Citizen Soldiers and leaders to understand your state or territory's metrics, and to continue towards achieving a healthy and ready force.

Citizen Soldiers at the Ready!

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Soldiers and Leaders



John F. Sampa
Command Sergeant Major
Army National Guard

Today's Army National Guard is not yesterday's Army National Guard. Our Nation is counting on us—more than ever—to be ready to respond to overseas contingency operations and domestic missions here in the homeland. Individual Soldiers cannot do that if they are not healthy and not ready. There is an expectation that as Army National Guard Soldiers, you, your squad, and your unit are ready to go when the state governor or your Nation calls

If something is important, you give it your time. Please take a look at the information in this report and use the data from your state to identify areas of focus and improvement. Don't compare your state against other states. Look at your shortfalls and make a plan to improve within your scope of influence. Use your position as a commander, command sergeant major, first sergeant, or squad leader to influence your Soldiers and explain to them the importance of individual medical readiness.

Here are some suggestions on the way forward. Leaders need to prioritize individual medical readiness events at units within their state. Readiness events are important and must be given the same planning and attention as any other training exercise. Leaders need to maximize their "present for duty" counts during these events to reduce the rework caused by absences. If a Soldier does miss the event, both the Soldier and the leader are responsible for making it up. Accountability is key.

Lastly, this is also about your personal health. Take the time to care for yourself. It is easy to get too busy to do the things we need to do as Soldiers. Physical fitness, sleep, healthy nutrition, and yes...drinking water are key to keeping our bodies fit and ready to respond when that call comes. We say that readiness is our number one priority; I challenge all of you to make it a reality.

Citizen Soldiers at the Ready!

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The 2018 U.S. Army National Guard Health of the Force Report

Welcome to the 2018 *Health of the U.S. Army National Guard (ARNG) Force* report, which presents health surveillance data from Fiscal Year 2017 (FY17). Similar to the U.S. Army Active Component (AC) *Health of the Force* (HOF) report, this publication describes State, Territory, and area population health metrics for ARNG Soldiers based on national leading health indicators and military-relevant measures of health readiness. Soldier readiness is the U.S. Army's number one priority, and medical readiness is a key component of improving a Soldier's readiness. The HOF reports on current Soldier health, provides understanding of the impact of select health factors, and offers suggestions/resources to assist with improving Soldier readiness.

The Citizen Soldiers of the ARNG face numerous health challenges, some of which are distinct from those of the AC population. Due to the unique roles in which ARNG Soldiers serve, and their limited time spent in uniform (thus limiting their access to TRICARE coverage), the majority of ARNG Soldiers are more similar to local civilian populations than with their AC counterparts.

Roles of ARNG Soldiers

The majority of ARNG members (85%) are "Traditional Soldiers," i.e., those who are obligated to complete 39 total training days per year (2 drill days/month x 12 months + 15 days annual training (AT). Traditional Soldiers are, on average, younger than Active Guard Reserve (AGR) Soldiers or National Guard dual-status technicians (Military Technicians, known as Mil Techs) and must manage the demands of civilian careers and educational pursuits while fulfilling their annual ARNG duties. While Traditional Soldiers enjoy educational benefits and monetary compensation based on their 39 total training days, their service in the ARNG does not include the benefit of access to either TRICARE or State-sponsored health insurance.

National Guard Title 5 employees comprise several categories of employees that were required to convert under the National Defense Authorization Act of 2018. The first category, formerly known as Non-Dual Status employees, were employed under the authority of Title 32, but did not have a military membership requirement; they were civilian competitive employees. They have been converted to Title 5 National Guard Employees and remain in competitive service as civilians. The second category of employees comprises 13% of the Title 32 Dual Status employees. These employees were converted to Title 5 National Guard Employees, i.e., civilian employees who no longer require a military enlistment or appointment. These employees remain in the excepted service; however, they are now civilian full-time employees who "may" still be members of the National Guard. As full-time employees of the ARNG, Title 5 employees have access to federally-sponsored health insurance plans.

National Guard dual-status technicians (Military Technicians or Mil Techs) are civilians who work for the National Guard as full-time state employees, providing continuity and expertise in specialized military occupations as full-time members of the ARNG, thus their dual status. Mil Techs are in an ARNG Soldier duty status only 39 days per year (unless otherwise mobilized for a State/Federal mission). As full-time employees of their respective states, ARNG Mil Techs have access to state-sponsored health insurance plans.

ARNG Data Availability

The data sources used to describe AC Soldiers' health and readiness status are not generally available for ARNG Soldiers, as no unified collection system of individual medical data currently exists. The 2018 *Health of the ARNG Force* report relies on administrative data collected and maintained independently by the ARNG and on self-reported information collected through the Periodic Health Assessment (PHA) during the annual Soldier medical exam. When possible, ARNG Soldiers are described in terms of their roles as AGR/Mil Techs or Traditional Soldiers. The groups of AGR and Mil Techs were combined for analysis and reporting as both groups are employed full-time year-round fulfilling similar ARNG roles/duties and have similar access to continuous health insurance (TRICARE or state-sponsored health insurance) provided by the ARNG or State. It may not be appropriate to make direct comparisons between the health status and outcomes reported here and those reported for AC Soldiers. All values and statistics presented in this report are rounded to two significant figures; as a result of this rounding, the sum of values across population groups within a measure/ metric may not equal 100%.

This *Health of the Force* edition describes ongoing efforts by the ARNG to improve the health and readiness of ARNG Soldiers at the enterprise and State levels. The data described in this report, coupled with information from ongoing health promotion efforts, create a valuable tool with which leaders at all levels can pinpoint challenges and identify possible solutions. It is hoped that the 2018 *Health of the ARNG Force* may facilitate informed decisions that ultimately improve the readiness and health of ARNG Soldiers, Civilians, and Families.

"The United States Army National Guard is more than just a job. Guard Soldiers respond when disaster strikes at home, and answer the call when their country needs them around the world. Army National Guard Soldiers have the unique dual mission—serving both community and country."

— LTG Timothy J. Kadavy Director, Army National Guard

DEMOGRAPHICS

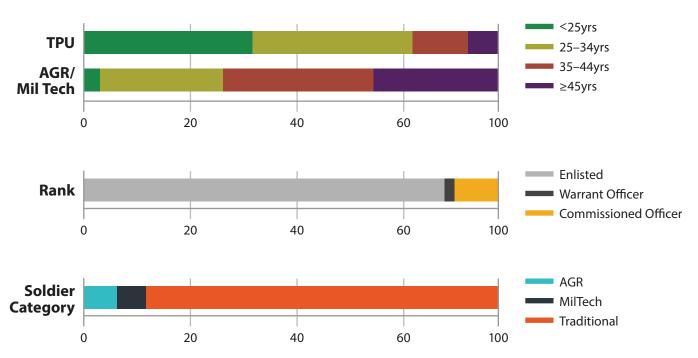
Sex and Rank/Grade

In FY17, the ARNG consisted of 377,354 Soldiers. The majority of ARNG Soldiers were males (83%) and Enlisted (87%). Of the Officers, 2.4% were Warrants and 11% were Commissioned. These data are virtually unchanged from FY16.

Soldier Type

Traditional Soldiers comprised 85% of the ARNG in FY17, an increase from 83% in FY16. AGR/Mil Techs comprised the remaining 15% (8.1% and 6.9%, respectively). The sex distribution of Soldiers did not differ by Soldier type: 83% of Traditional Soldiers were males, as were 83% of AGR/Mil Techs (82% and 83%, respectively).

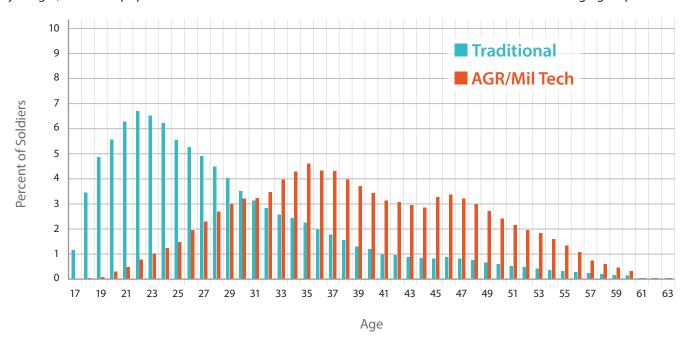




The age of ARNG Soldiers differed by Soldier type. When the age distribution was compared by median, the Traditional Soldier age was 25 years while the AGR/Mil Tech Soldier age was 28 years. The mean age of Traditional Soldiers was 29 years in FY17, compared to 39 years for AGR/Mil Tech Soldiers. The difference in mean age between these two groups is expected since AGR/Mil Techs complete specialized duties that may require additional training and experience. It is important to consider this inherent difference in mean age when evaluating the health status and healthcare needs/services of these two populations.

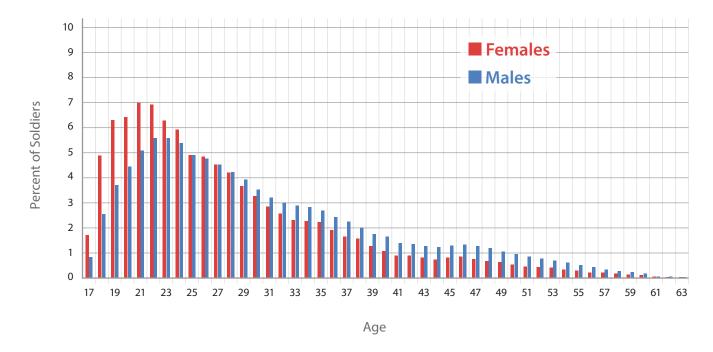
Age Distribution by Soldier Status (Traditional vs. AGR/Mil Tech), ARNG Soldiers, FY17

Age distribution also differed by Soldier type. In FY17, 65% of Traditional Soldiers were 29 years of age or younger, while the population of AGR/Mil Techs showed a more even normal distribution across age groups.



Age Distribution by Sex, ARNG Soldiers, FY17

The age distribution of ARNG Soldiers by sex was similar among males and females in FY17. However, the proportion of female Soldiers between the ages of 19 and 29 was higher than the proportion of male Soldiers in that age group. This outcome represents a slight shift from FY16, where the proportion of female Soldiers between the ages of 19 and 29 was higher than the proportion of male Soldiers in that age group.



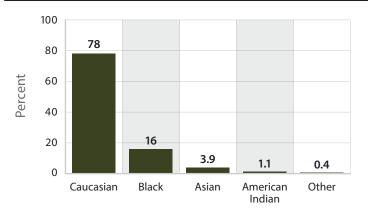
Introduction Demographics

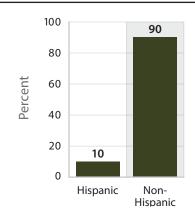
DEMOGRAPHICS (cont.)

Race/Ethnicity

A majority of ARNG Soldiers are Caucasian, followed by African American, Asian, American Indian, and Other; additionally, the majority of ARNG Soldiers self-identify as Non-Hispanic.

ARNG Soldiers by Race/Ethnicity, FY17

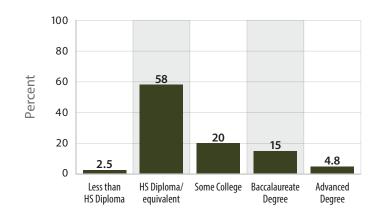




Education Level

Educational attainment can serve as an important proxy measure for socioeconomic status, which directly influences overall health. The ARNG offers education benefits and incentives to its Soldiers to further their professional development and enable them to better complete their ARNG missions. In FY17, 58% of ARNG Soldiers had earned a high school diploma or equivalency as their highest level of education, while 40% of ARNG Soldiers had pursued post-secondary education.

Educational Attainment of ARNG Soldiers, FY17



FY17 SUMMARY STATISTICS

When possible, HOF metrics are reported in terms of ARNG Soldier type (AGR/Mil Tech or Traditional). Data by Soldier type were not available for all metrics in this report.

MEDICAL AND DENTAL READINESS

Medical Readiness

Of ARNG Soldiers, 86% were medically ready for deployment within 72 hours [Medical Readiness Classification (MRC) 1 or 2].

Dental Readiness

Of ARNG Soldiers, 93% were dentally ready or partially dentally ready for deployment [Dental Readiness Classification (DRC) 1 or 2].

HEALTH OUTCOMES

Behavioral Health

In FY17, 5% of ARNG Soldiers endorsed symptoms of depression, and 6% endorsed symptoms of Posttraumatic Stress Disorder (PTSD).

Among Traditional Soldiers, 4.3% endorsed symptoms of depression, and 5.5% endorsed symptoms of PTSD.

Introduction Summary Statistics

FY17 SUMMARY STATISTICS (cont.)

Among AGR/Mil Tech Soldiers, 5.3% endorsed symptoms of depression, and 8.1% endorsed symptoms of PTSD.

Drug Use

In FY17, 2.0% of ARNG Soldiers tested positive for illegal drug use.

HEALTH FACTORS

Obesity and Overweight

Of ARNG Soldiers, 25% were classified as obese and 45% were classified as overweight based on Centers for Disease Control and Prevention (CDC) body mass index (BMI) categories. Among Traditional ARNG Soldiers, 24% were classified as obese, and 44% were overweight. Among AGR/Mil Tech Soldiers, 30% were classified as obese, and 51% were overweight.

Flagged for Weight

Of ARNG Soldiers, 5% were flagged for weight.

Army Physical Fitness Test (APFT) Failure

Of ARNG Soldiers, 12% failed the APFT.

Hazardous Alcohol Use

Of ARNG Soldiers, 6% were classified as exhibiting hazardous levels of alcohol use.

Among Traditional ARNG Soldiers, 6.4% were classified as exhibiting hazardous levels of alcohol use, and 6.0% of AGR/Mil Techs were classified as exhibiting hazardous levels of alcohol use.

Tobacco Use

Of ARNG Soldiers, 14% smoked and 12% used smokeless tobacco.

Among Traditional Soldiers, 14% smoked tobacco, and 12% used smokeless tobacco; among AGR/Mil Tech Soldiers, 13% smoked tobacco, and 14% used smokeless tobacco.

Hypertension

In FY17, 7% of ARNG Soldiers had a diagnosis of hypertension. Among Traditional ARNG Soldiers, 5% had a diagnosis of hypertension. Among AGR/Mil Techs ARNG Soldiers, 14% had a diagnosis of hypertension.

PERFORMANCE TRIAD

Sleep

Across ARNG Soldiers, 48% reported getting 7 or more hours of sleep per night on weeknights and 75% achieved this target on weekends.

Activity

Across ARNG Soldiers, 75% reported engaging in 2 or more days of resistance training per week and 84% achieved adequate moderate and/or vigorous aerobic activity each week.

Nutrition

Across ARNG Soldiers, 36% reported eating two or more servings of fruit per day and 46% reported eating two or more servings of vegetables per day.

ARNG HEALTH INDEX SCORES

Health metrics included in this report were compiled into a weighted ARNG Health Index Score that summarizes and ranks the overall health of ARNG Soldiers in each State. While health indices provide a measure of health that helps identify populations that could benefit from health prevention measures, aggregate indices may hide some of the driving factors and social determinants of health. Healthcare decision and policy makers must further review individual measures that comprise the index in order to identify and effectively target key outcomes or behaviors that are the most significant health and readiness detractors for each State/Territory.

2018 HEALTH OF THE ARNG FORCE INTRODUCTION **HEALTH OF THE ARNG FORCE**

METRICS

MEDICAL READINESS

Medical and Dental Readiness

HEALTH OUTCOMES

- Behavioral Health
- Suicide Prevention
- Duty-Related Injuries
- Drug Use and Testing
- Hearing Loss Prevention

HEALTH FACTORS

- Obesity and Overweight
- Flagged for Weight
- APFT Failure
- Hazardous Alcohol Use
- Tobacco Use
- Hypertension

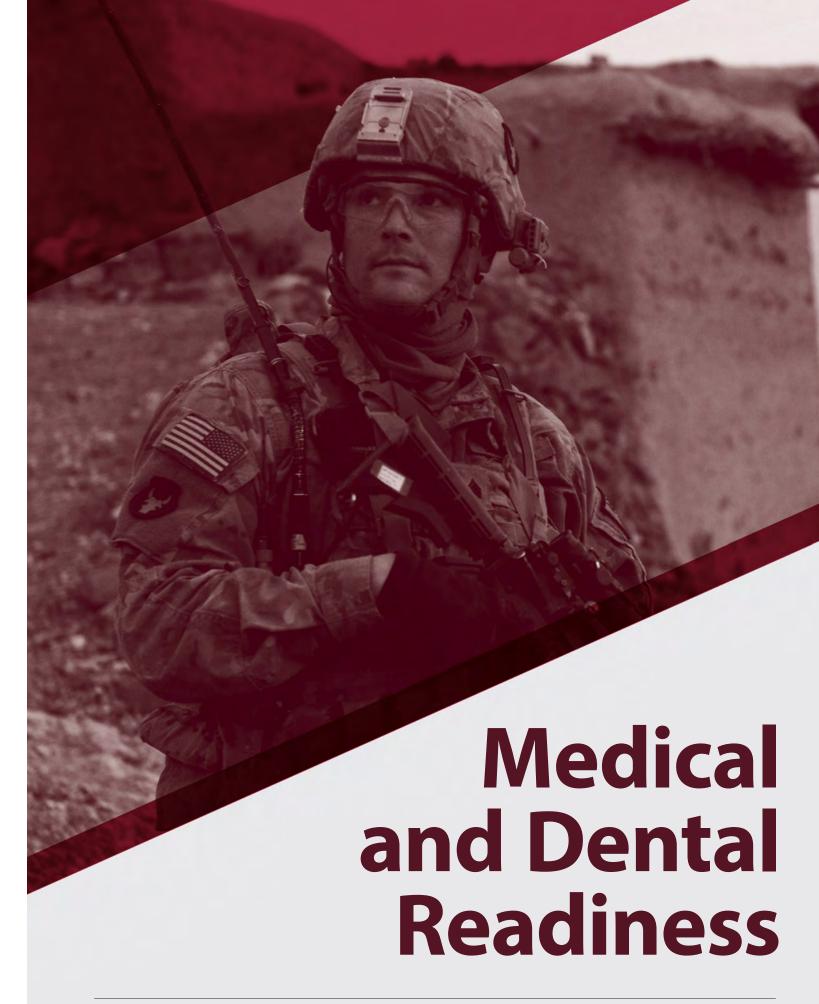
Overview

The Chief Surgeon of the U.S. ARNG has identified medical readiness as the leading public health priority for the ARNG. Presented in this report are data on overall Soldier medical readiness, as well as health factors and outcomes that can directly impact Soldier medical readiness. This report seeks to serve as a tool for ARNG leaders at all levels to identify and track some of the underlying factors and conditions impacting Soldier health. Once armed with this knowledge, ARNG leaders can create opportunities for intervention such as programs, policies, and procedures to improve Soldier medical readiness.

Medical Readiness data include medical and dental readiness classifications (MRCs and DRCs, respectively), both of which are direct components of overall Soldier medical readiness rates for the ARNG.

Health Outcomes data reflect the behavioral health, substance use, and chronic health conditions, as well as duty-related injuries. These health conditions influence a Soldier's ability to complete their mission and can, in some cases, affect a Soldier's readiness status.

Health Factors include elements that are symptomatic of overall health status or that may indicate engagement in risky behaviors that endanger a Soldier's readiness. If not addressed early, Soldier body composition (obesity and overweight, and flag for weight), physical fitness, hazardous alcohol use, tobacco use, and hypertension could all contribute to more serious health issues and hinder Soldier readiness.



Medical and Dental Readiness

On 14 August 2015, Chief of Staff of the Army, GEN Mark A. Milley, identified readiness as the U.S. Army's number one priority. Medical readiness is a key part of the overall Soldier readiness priority for both the AC and the ARNG. To enable commanders to manage their forces, each Soldier is assigned one of four classifications and a DRC (which can influence the MRC).

Soldiers who are classified as MRC1 or MRC2 are medically ready and deployable. Soldiers classified as MRC1 are fully medically ready and immediately deployable (within 72 hours). Soldiers classified as MRC2 are also fully medically ready and deployable but have temporary profiles up to 14 days in length. Soldiers in MRC3 status are not medically ready and default to non-deployable status. These Soldiers may be in need of an administrative review or medical evaluation board (MEB) or may have a deployment limiting code (including pregnancy) or a temporary profile greater than 14 days. Soldiers classified in MRC4 status have either missed or are overdue for a mandatory medical or dental exam. Soldiers in MRC4 status are not medically ready and are, by default, non-deployable until a commander determines the cause of their MCR4 status.

In FY17, 86% of ARNG Soldiers were considered medically ready (MRC1 or 2) and deployable within 72 hours. The proportion of ARNG Soldiers medically ready and deployable remained constant between FY16 and FY17 at 86%. The stable medical readiness rate is important because, on average, 4 out of every 5 ARNG Soldiers are able to be called upon during a mobilization/deployment event nationwide. The proportion of Soldiers medically ready varied by location, ranging from 81% to 91% across States.

Dental readiness is an integral part of overall Soldier medical readiness. Soldiers classified as DRC1 are fully dentally ready and immediately deployable. Soldiers with a DRC2 classification are partially dentally ready with minor treatment needed, but still immediately deployable. Soldiers with a DRC3 or DRC4 are dentally unready and non-deployable. DRC3 status is assigned due to a dental condition that requires urgent or emergent treatment (often requiring multiple appointments) and is likely to take 30 days or more. A DRC4 classification is assigned to Soldiers delinquent or overdue for their annual dental exam.

Between FY16 and FY17, the proportion of DRC1 or 2 ARNG Soldiers decreased slightly, from 94% to 93%; this change is not statistically significant. In FY17, 4.7 out of every 5 ARNG Soldiers across States/Territories were able to be called upon during a mobilization/deployment event nationwide based on dental readiness. The proportion of Soldiers dentally ready varied by location, ranging from 87% to 97%.



Overall, 86% of ARNG Soldiers were classified as medically ready within 72 hours.

Rates ranged from 81% to 91% across the States and Territories.



Overall, 93% of ARNG Soldiers were classified as dentally ready for deployment.

Rates ranged from 87% to 97% across the States and Territories.

"We will always be ready to fight today, and we will always prepare to fight tomorrow. Our most valued assets, indeed, the Nation's most valued assets, are our Soldiers, and our solemn commitment must always be to never send them into harm's way untrained, poorly led, undermanned, or with less than the best equipment we can provide. Readiness is #1, and there is no other #1."

— **GEN Mark A. Milley** Chief of Staff of the Army

States/Territories with the Highest Medical Readiness, ARNG Soldiers, FY17

1	WEST VIRGINIA	91%
2	UTAH	91%
3	NORTH DAKOTA	91%
4	PUERTO RICO	90%
5	WISCONSIN	90%

States/Territories with the Highest Dental Readiness, ARNG Soldiers, FY17

1 UTAH	97%
2 PUERTO RICO	97%
3 WEST VIRGINIA	97%
4 MAINE	96%
5 OHIO	96%



#GuardYourSMILE: Why Dental Readiness is Key

Did you know your dental health impacts your overall readiness for duty?





As a Soldier, you are

exam each year.

required to get a dental



What's in it for me?

Getting your annual dental exam means you:

- · Are compliant with Army regulations
- · Identify developing tooth or mouth
- Help prevent oral disease or other health problems

overdue dental exam or missed dental treatment

· Keep yourself fit for duty

What happens when I miss or skip my dental exam?

- · Not be paid for drill attendance
- · Be unable to support your unit's mission
- Develop a dental condition or pain that can hinder your performance



Ready to see a dentist?



Helpful Dental Resources

Get a dental exam with a civilian dentist. Ask them to complete form DD 2813. Then, return it to your unit.



Need treatment?

Ask your unit to schedule an NO COST TO YOU.

OR



Have the dentist complete form DD 2813. Return the form to your unit.

Getting your annual dental exam will keep you (and your unit) smiling!



Find a dentist through TRICARE http://gyh.tips/TricareDentist

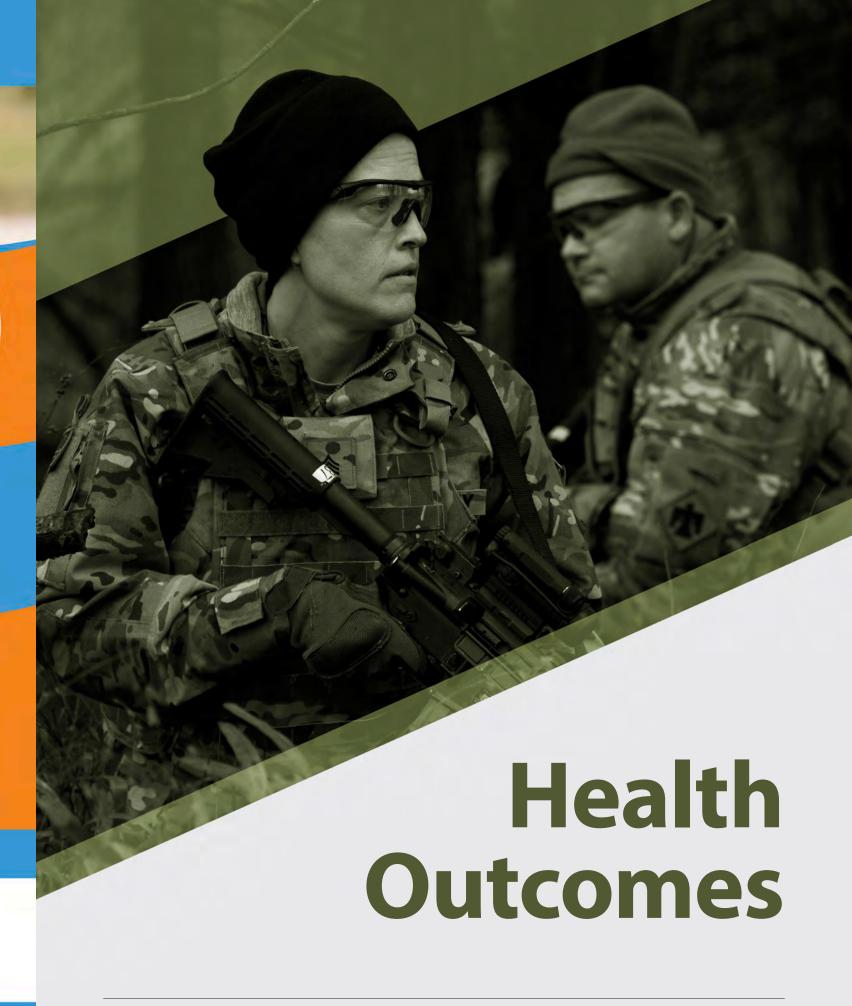


Download dental form DD 2813 http://gyh.tips/DD2813



Find low-cost dental care options in your area http://gvh.tips/DentalCare





HEALTH OUTCOMES #guardyoursmile www.GuardYourHealth.com

Behavioral Health

The cumulative effect of Soldier and civilian life stressors can be profound on the psychological well-being and condition of ARNG Soldiers, their Families, and the community at large. As a response to these cumulative stressors, ARNG Soldiers are potentially at risk of developing behavioral health disorders such as Posttraumatic Stress Disorder (PTSD), depression, and substance abuse. The impacts of undiagnosed and untreated behavioral health conditions among ARNG Soldiers can be extremely detrimental to the Force, potentially resulting in increased levels of medical boarding and early discharge, and may be associated with suicidal behavior.

Behavioral health concerns are identified and monitored through effective behavioral health screening. As part of their annual Periodic Health Assessment (PHA), ARNG Soldiers complete several behavioral health screens, including the PTSD Checklist-Civilian Version (PCL-C) and the Patient Health Questionnaire (PHQ-8). Soldiers who endorse symptoms of PTSD or mild to severe depression are offered behavioral education and, at the provider's discretion, may be referred to a behavioral health provider for further evaluation. As a result, the positive impact is a more ready and resilient ARNG force.

In FY17, 6.0% of ARNG Soldiers reported symptoms that could be consistent with a diagnosis of PTSD, a 2% percent increase from FY16 (4.0%). The observed increase in reported symptoms may, in fact, reflect lower levels of stigma and greater access to care. Identifying concerns

early and encouraging Soldiers to seek treatment are a primary goal of Army Medicine and lead to better clinical outcomes. Soldiers with behavioral health conditions who do not receive timely treatment are at risk for negative outcomes and decreased readiness. Examining PCL-C results by Soldier sex reveals that female Soldiers (6.4%) were slightly more likely than male Soldiers (5.9%) to report symptoms that could be consistent with a diagnosis of PTSD. When Soldier type is assessed for PCL-C scores, Traditional Soldiers (5.5%) were less likely than AGR/Mil Tech Soldiers (8.1%) to report symptoms that could be consistent with a diagnosis of PTSD. The proportion of Soldiers reporting symptoms that could be consistent with a diagnosis of PTSD varied by State, ranging from 2.6% to 13.8% for FY17.

In FY17, 4.5% of ARNG Soldiers reported symptoms that could be consistent with a diagnosis of clinical depression, a 1.5% increase from FY16 (3.0%). Examining PHQ-8 results by Soldier sex reveals that female Soldiers (5.0%) were slightly more likely than male Soldiers (4.4%) to report symptoms that could be consistent with a diagnosis of depression.

When Soldier type is considered for PHQ-8 scores, Traditional Soldiers (4.3%) were less likely than AGR/Mil Tech Soldiers (5.1%) to report symptoms that could be consistent with a diagnosis of depression. The proportion of Soldiers that reported symptoms that could be consistent with a diagnosis of depression varied by State, ranging from 2.4% to 8.7% for FY17.

BEST RANKING STATES/TERRITORIES

States/Territories are not rank-ordered for behavioral health conditions because higher percentages of Soldiers endorsing symptoms of behavioral health disorders may, in fact, reflect lower levels of stigma and higher levels of self-awareness among Soldiers. Identifying behavioral health concerns early and encouraging Soldiers to seek treatment is a primary goal of the ARNG and leads to better long-term outcomes. Soldiers who do not receive timely treatment for behavioral health concerns are at risk for negative outcomes and decreased readiness.



Overall, 6.0% of ARNG Soldiers reported symptoms that could be consistent with a diagnosis of PTSD.

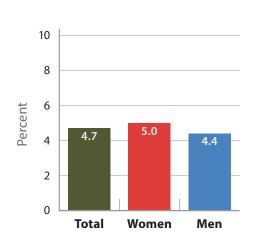
Rates ranged from 2.6% to 14% across the States and Territories.



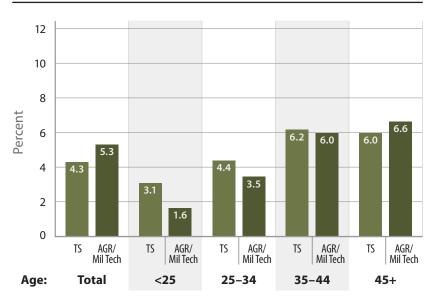
Overall, 4.5% of ARNG Soldiers reported symptoms that could be consistent with a diagnosis of clinical depression.

Rates ranged from 2.4% to 8.7% across the States and Territories.

Percent Reporting Symptoms Consistent with Depression by Sex, ARNG Soldiers, FY17



Percent Reporting Symptoms Consistent with Depression by Age and Soldier Status, ARNG Soldiers, FY17

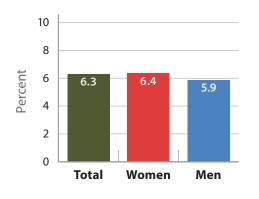


TS=Traditional Soldiers

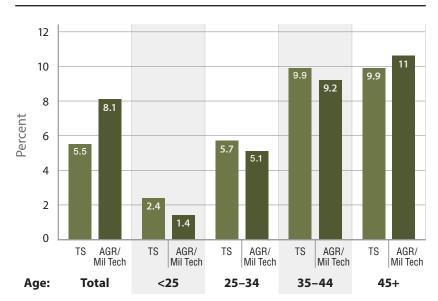
2018 HEALTH OF THE ARNG FORCE
HEALTH OUTCOMES 17

Behavioral Health

Percent Reporting Symptoms Consistent with PTSD by Sex, ARNG Soldiers, FY17



Percent Reporting Symptoms Consistent with PTSD by Age and Soldier Status, ARNG Soldiers, FY17



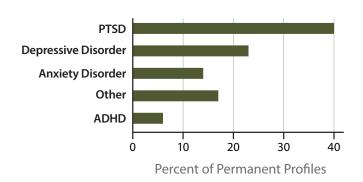
TS=Traditional Soldiers

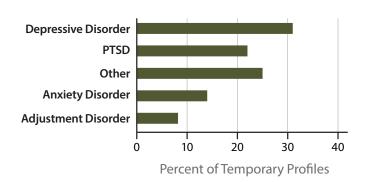
Physical Profiles: Behavioral Health

In the case of medical, physical, or behavioral health condition and/or and disability, a clinical practitioner can place an ARNG Soldier on a temporary or permanent physical profile in compliance with AR 40-501. A profile may be assigned for six factors: Physical capacity or stamina, Upper extremities, Lower extremities, Hearing and ears, Eyes, and Psychiatric (PULHES). A temporary profile is assigned when a condition is considered short-term (duration of less than 1 year), the correction or treatment of the condition is medically advisable, and the correction will usually result in a higher physical capacity. If a profile is needed beyond 12 months, the temporary profile must be converted to permanent. Both temporary and permanent profiles can impact a Soldier's ability to deploy/mobilize in support of the ARNG mission.

In FY17, 1.9% of ARNG Soldiers had behavioral health-related medical profiles; approximately 78% of these were categorized as permanent. The following table lists the top five behavioral health diagnoses that resulted in permanent or temporary profiles.

Top Five Behavioral Health Diagnoses Resulting in Permanent or Temporary Profiles, ARNG Soldiers, FY17

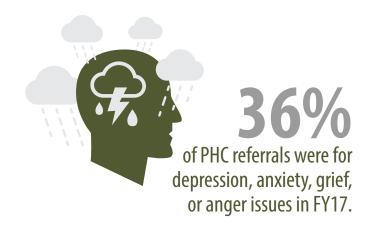




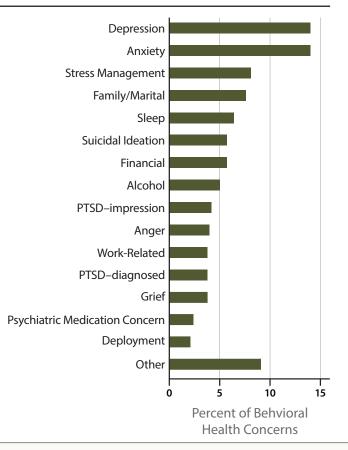
ARNG Resources

The ARNG has a network of Psychological Health Coordinators (PHCs) whose primary role is to provide behavioral health assessments and referrals for ARNG Soldiers and their Families. The PHC serves as a behavioral health consultant, subject matter expert, advocate of psychological health, and possible case manager to ensure the referred individual follows through with treatment.

The graph at the right shows the most frequent behavioral health concerns with which PHCs assisted in FY17.



Most Frequent PHC-assisted Behavioral Health Concerns, ARNG Soldiers, FY17



SPOTLIGHT

SUICIDE PREVENTION:

A TOP PRIORITY FOR THE ARNG

The ARNG faces a number of unique challenges in preventing suicides, including a geographically dispersed workforce and limited Soldier face-to-face time with leadership. ARNG Leaders may only see their Soldiers one weekend a month and thus may be unaware of a Soldier who needs help.

Several demographic and interpersonal factors have been investigated for an ARNG Soldier's risk of death by suicide. The specific factors analyzed were rank/grade, deployment status, personal relationship status, age, race/ethnicity, and sex. Based on these analyses, ARNG Soldiers most at risk for death by suicide are—

- Enlisted (E1-E4),
- Single,
- 18–24 years old,
- Caucasian, and
- Male.



deployed.

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The analyses failed to conclude that there is a proven correlation between deployments and ARNG Soldier suicides.

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2018 HEALTH OF THE ARNG FORCE
HEALTH OUTCOMES

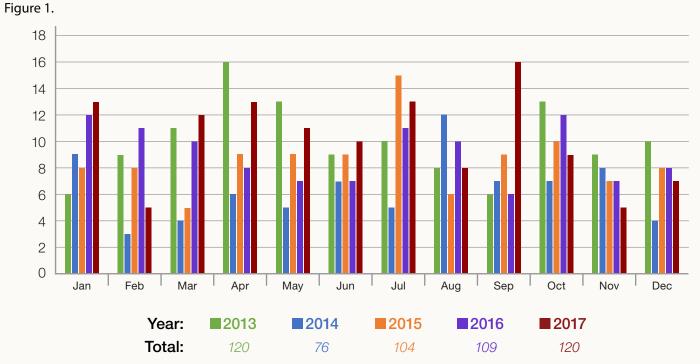
Behavioral Health

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In calendar years (CY) 2013 through 2017, the incidence of suicide among ARNG Soldiers fluctuated monthly, showing a statistically significant increase in the third and fourth quarters (Figure 1). The suicide incidence

rate for ARNG Soldiers increased from 22 per 100,000 ARNG Soldiers in CY14 to 35 per 100,000 ARNG Soldiers in CY17. This increase represents a statistically significant change among CY estimates (Figure 2).

Incidence of Suicide, ARNG Soldiers, 2013–2017



Current Efforts

The ARNG is in the process of conducting a focused examination of factors (geographic location, social support, civilian employment status, etc.) associated with an increased risk for suicidal behavior among the ARNG Forces.

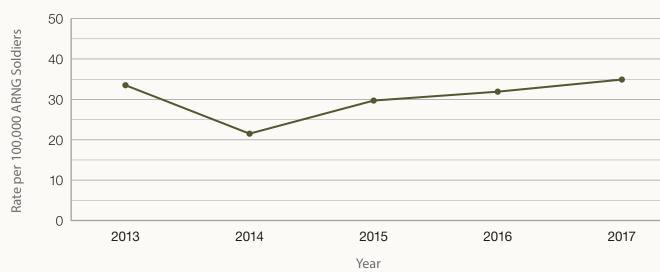
Risk Reduction Campaign Plan

The Risk Reduction Campaign Plan (R2CP) is currently being implemented in all States to address resilience and risk reduction in ARNG Soldiers and Family members. R2CP includes four main initiatives:

- Leader engagement
- Training
- Social media
- Analytics

Incidence Rate of Suicide, ARNG Soldiers, 2013–2017

Figure 2.



National and Local Suicide Prevention Resources

Master resilience trainers, substance abuse trainers, and suicide prevention program managers are in each State, Territory, and the District of Columbia to assist ARNG leadership with resilience training, risk reduction, and suicide prevention efforts. Training is tracked in the Digital Training Management System (DTMS).



ARNG Soldiers who need immediate help may call: 1-800-273-TALK (8255).



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Information is also available at the following Facebook and Milsuite sites:

- https://www.facebook.com/arnghrs
- -- https://www.milsuite.mil/book/groups/arng-ready-and-resilient community-health-promotion-council-operations
- https://www.milsuite.mil/book/groups/arng-fatality-review-discussion-group

More Information

For information about ARNG suicide prevention programs, contact the National Guard Bureau Suicide Prevention Section at ng.ncr.ngb-arng.mbx.arngsuicideprevention@mail.mil.

DID YOU KNOW?

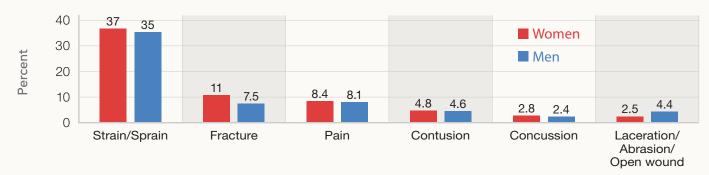
MUSCULOSKELETAL DUTY-RELATED INJURIES

Musculoskeletal duty-related injuries (MDRI) are injuries that occur while ARNG Soldiers are in an active drilling status. In FY17, approximately 7,500 MDRI were reported and logged in the Medical Electronic Data (for) Care History and Readiness Tracking (MED-CHART) system. Male Soldiers accounted for 78% of all MDRI; however, when MDRI rates are examined by sex, female Soldiers (2,500 per 100,000 Soldiers) have a higher burden of MDRI than males (1,900 per 100,000 Soldiers). This outcome is consistent with the paradigm that women generally have lower aerobic endurance and muscular strength—both of which are risk factors for injury—compared to men. When men and women possess similar aerobic endurance and muscular strength, the injury risk is similar.¹

For ARNG Soldiers, sprains and strains accounted for approximately 36% of all MDRI logged in MEDCHART

in FY17. Female Soldiers (37%) experienced a slightly higher incidence of sprains and strains than male Soldiers (35%). Approximately half of strains and sprains occurred in the lower extremities, an occurrence that is corroborated by multiple studies of military and other physically active populations.²⁻⁷ Sprains can be described as injuries to ligaments or joints, whereas strains are injuries to tendons or muscles. Fractures (8.2%), pain (8.1%), contusions (4.6%), and concussions (2.5%) were the next most common MDRIs in MEDCHART for ARNG Soldiers in FY17. The proportions of pain, contusions, and concussions were similar between males (8.1%, 4.6%, and 2.4%, respectively) and females (8.4%, 4.8%, and 2.8%, respectively). The burden of fractures differed slightly between males (7.5%) and females (11%); this difference was not statistically significant. More information on duty-related injuries can be found in AR 600-8-4.8

Top Duty-Related Injuries, ARNG Soldiers, FY17



References

- 1 Anderson, M.K., T. Grier, E.O. Dada, M. Canham-Chervak, and B.H. Jones. 2017. The Role of Gender and Physical Performance on Injuries: An Army Study. Am J Prev Med, 52(5):e131–e138.
- 2 Jones, B.H. D.N. Cowan, J.P. Tomlinson, J.R. Robinson, D.W. Polly, and P.N. Frykman. 1993. Epidemiology of injuries associated with physical training among young men in the army. *Med Sci Sports Exerc*, 25(2):197–203.
- 3 Jones, B.H., M.W. Bovee, and J.J. Knapik. 1992. Associations among body composition, physical fitness, and injury in men and women army trainees. In: Marriott, B.M. and J. Grumstrup-Scott, eds. *Body Composition and Physical Performance*. Washington, DC: The National Academies Press.
- 4 Jones, B.H., M.W. Bovee, J.M. Harris 3rd, and D.N. Cowan. 1993. Intrinsic risk factors for exercise-related injuries among male and female army trainees. Am J Sports Med, 21(5):705–10.
- 5 Cowan, D.N., B.H. Jones, and J.R. Robinson. 1993. Foot morphologic characteristics and risk of exercise-related injury. Arch Fam Med, 2(7):773–7
- 6 Grier, T. Canham-Chervak, M. Anderson, M. Bushman, T. Jones, B H. 2017. Effects of Physical Training and Fitness on Running Injuries in Physically Active Young Men. J Strength Cond Res, 31(1) 207–216.
- 7 Jones, B.H., J.McA. Harris, T.N. Vinh, and C. Rubin. 1989. Exercise-induced stress fractures and stress reactions of bone: epidemiology, etiology, and classification. Exerc Sport Sci Rev, 17(1):379-421.
- 8 Department of the Army. 2008. Regulation 600–8–4, Line of Duty Policy, Procedures, and Investigations. https://armypubs.army.mil.

SPOTLIGHT

UNIT RISK INVENTORY HELPS MITIGATE HIGH-RISK BEHAVIORS

Approximately two-thirds of Traditional Soldiers are 29 years of age or younger, and a majority of these Soldiers fall into a high-risk behavior age group (18 to 25 years). High-risk behaviors are destructive and can lead to decreased Soldier and unit readiness. Unit commanders can use the Unit Risk Inventory (URI), a 53-item Soldier questionnaire, to identify and reduce high-risk behaviors. The URI assesses the following areas:

- Alcohol/drug use
- Safe sex practices
- Command factors
- Child/spouse abuse
- Stress levels
- Violence/crimes
- Self perceptions
- Suicidal indicators
- Relationships
- Financial problems

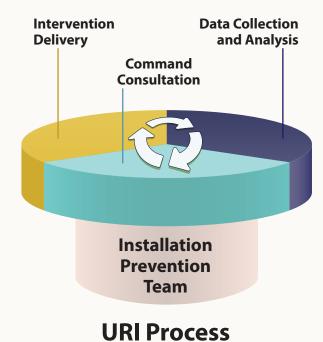
When a high-risk Soldier is identified, the unit commander is informed immediately and is advised to brief the Soldier on available resources. Results of the URI can be used to inform the development of a unit Risk Mitigation Plan (RMP). The RMP provides proposed unit education and early interventions using available ARNG, State, and local resources. Contracted staff support URI survey administration and analysis and help develop unit RMPs.

As of FY17, approximately 160,000 ARNG Soldiers had taken the URI. State leadership is encouraged to utilize the surveys to identify and promote programs and initiatives that mitigate Soldiers' high-risk behaviors.

For information on the URI or to acquire a state-specific roll-up report, contact the State's or Territory's Alcohol and Drug Control Officer. For additional information about the URI, contact the Army G1's Resilience and Risk Reduction Branch at usarmy.pentagon.hqda-dcs-g-1. mbx.urisurvey-acsap@mail.mil.

Unit Risk Inventory—

- Is an Army-approved Command Climate Survey.
- Is designed for company-level use.
- Screens for high-risk behaviors and attitudes that compromise unit readiness.
- Can be completed in 30 minutes.
- Incurs no cost to installations or units.



References

- 1 Office of the Deputy Assistant Secretary of Defense. 2014. Military Community and Family Policy. 2014 Demographics. Profile of the Military Community, http://download.militaryonesource.mil/12038/MOS/Reports/2014-Demographics-Report.pdf.
- 2 Unit Risk Inventory Marketing. Risk Reduction Program.

Drug Use and Testing

The use of illicit drugs and the abuse of alcohol are inconsistent with the military's standards of conduct and professionalism and can negatively impact the Army mission.

Drug testing is an important tool to assist in the identification and prevention of Soldier drug abuse. AR 600–85 provides guidance for drug testing in the ARNG. Unit commanders randomly select and test 10% of their unit each month, or 25% of their unit each quarter, for illicit substances and alcohol abuse.

In FY17, the ARNG tested more than 370,000 urine specimens for drugs; 2.0% of ARNG Soldiers tested positive for illicit drugs. By comparison, the Army AC illicit-positive rate was 0.72%. ARNG Soldiers not on Active Status accounted for nearly all of illicit-positive results (99%). The percentage of ARNG Soldiers who tested positive for illicit drugs varied by State and ranged from 0.50% to 4.0%.

States/Territories with the Lowest Rate of Illicit-Positive Results, ARNG Soldiers, FY17		
1 UTAH	0.50%	
2 GUAM	0.60%	
3 NORTH DAKOTA	0.70%	
4 SOUTH DAKOTA	0.80%	
5 VIRGIN ISLANDS	0.90%	



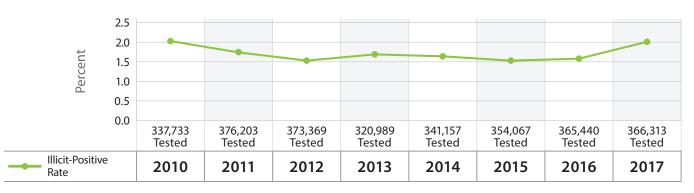
Overall, 2.0% of ARNG Soldiers tested positive for illicit drug use.

Rates ranged from 0.50% to 4.0% across the States and Territories.

"Substance use and behavioral health often go hand in hand. Soldiers may turn to drugs or alcohol to ease their feelings of stress, depression, or anxiety. Posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI) also increase Soldiers' risk for substance use/abuse."

—LTG (Ret.) Mark Hertling, U.S. Army
Former Deputy Commanding General for Initial Military Training

Illicit-Positive Rate, ARNG Soldiers, 2010–2017

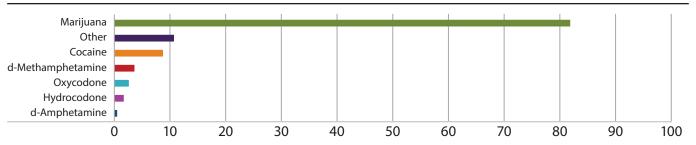


Types of Drugs Detected

Tetrahydrocannabinol (THC), the main psychoactive ingredient in marijuana, continues to be the most prevalently detected illicit drug in ARNG Soldiers, accounting

for 81% of all illicit-positive results. Of the illicit-positive results not cleared by medical staff as attributable to prescription drug use, 82% were for THC use.

Percentage of Illicit Positive Results by Drug, ARNG Soldiers, 2017



Prevention Resources

The ARNG has increased its drug prevention and testing efforts to reduce illicit-positive rates. The ARNG conducts a 2-hour annual Army Substance Abuse Program (ASAP) training for Traditional ARNG Soldiers and a 4-hour annual ASAP training for full-time members. Each State ASAP makes a list of resources and points of contact available to ARNG Soldiers. Each State and many individual counties have unique resources available for ARNG Soldiers. The ARNG has also expanded testing and prevention training in Recruit Sustainment Program units to reduce drug use in the high-risk age group of 18- to 25-year-olds.

Treatment Challenges

Traditional Soldiers who test positive for illicit substances during ARNG drug tests are required to undergo a substance abuse assessment and are referred to a State provider. Soldiers who require counseling or treatment must participate at their own expense unless the State has available resources. Full-time AGR or long-term Active Duty for Operational Support (ADOS) Soldiers in the ARNG have TRICARE insurance and may seek an assessment and any required treatment services through their assigned providers. Full-time ARNG members living within driving distance of an Army Medical Treatment Facility with a substance abuse program may access that program.

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Use the following behavioral health treatment facilities locator for help with substance abuse/addiction and/or mental health: https://www.findtreatment.samhsa.gov/.mil.

Soldiers who need help with a substance abuse problem should contact their local ASAP office.

SPOTLIGHT

ARNG HEARING LOSS PREVENTION

Noise-induced hearing loss is painless, progressive, permanent, and preventable. The focus of the Army Hearing Program (AHP) is to enhance Soldier survivability, lethality, and readiness and to enhance Soldier and DA Civilian performance, communication, and conservation of hearing. Hearing injuries impact mission performance during garrison activities, deployments, active training, and combat. The AHP is a comprehensive, multi-faceted program that consists of four key components: Hearing Readiness, Operational Hearing Services, Clinical Hearing Services, and Hearing Conservation. The AHP is not a hearing testing program; rather, it is a prevention and education program that incorporates hearing testing. Noise hazard identification and engineering controls, hearing protection use, hearing health education, and command enforcement are the preventive aspects of the AHP. Certified hearing conservation technicians, occupational health and preventive medicine personnel, and military audiologist program managers perform hearing testing and provide AHP oversight at over 161 Army installations worldwide.

In FY17, 290,000 reference and periodic ARNG Soldier hearing tests were recorded in the Defense Occupational and Environmental Health Readiness System—Hearing Conservation (DOEHRS-HC), the tri-Service monitoring hearing test system of record. DOEHRS-HC provides data to the Medical Protection System (MEDPROS) for determination of the Soldier's hearing readiness classification (HRC).

Among ARNG Soldiers with a positive initial hearing test, 36,000 ARNG Soldiers (76%) required follow-up testing, and 5,600 (2.4%) required a hearing readiness evaluation. Failure to complete follow-up testing compromises the hearing health of the individual as well as unit productivity.

In FY17, 16,000 ARNG Soldiers (6.6%) experienced a new hearing injury. The AHP hearing injury goal is less than 3% for Military personnel.

Based on averaged quarterly data, 260,000 ARNG Soldiers (75%) were hearing ready in FY17. The AHP hearing ready goal is at least 90%, consistent with the Office of the Surgeon General's Individual Medical Readiness (IMR) goal and exceeding the Assistant Secretary of Defense, Health Affairs DOD IMR goal of 85%.

Although hearing health in the ARNG has improved over time, noise-induced hearing loss and associated problems have not been eliminated. The AHP hearing test requirements ensure the hearing readiness of ARNG Soldiers is accurately documented, allowing commanders to make informed decisions regarding readiness and the hearing functionality of their Soldiers. Continued command emphasis on all aspects of the AHP, including consistent and appropriate hearing protection use, hearing health education, and noise hazard identification and engineering controls, is critical to promoting and enhancing Soldier readiness.

7500 of screened ARNG Soldiers were hearing ready in FY17.



of screened ARNG Soldiers experienced a new hearing injury in FY17. This is more than twice the AHP hearing injury goal of 3.0%.

For additional information and training resources on proper hearing protection, please see: https://phc.amedd.army.mil/topics/workplacehealth/hrc/Pages/Hearing-Conservation-(HC).aspxl



BUILDING HEALTHY MILITARY COMMUNITIES (BHMC)



"Our fundamental responsibility to the nation is to be a ready force."

-Gen. Joseph F. Dunford Jr.

19th Chairman of the Joint Chiefs of Staff

WHAT IS BHMC?

The BHMC pilot is a multi-year initiative that aims to better understand the unique challenges faced by geographically dispersed Service members and their families that may impact their readiness, resiliency, and well-being.

The BHMC pilot is being conducted in 7 states & each is assigned a State

Coordinator:
Florida
Indiana
Oklahoma
Maryland
Minnesota
Mississippi

New Mexico

The Department of Defense (DoD) is committed to supporting the health and well-being of Service members and their families. Many Service members live off of installations, creating a unique set of challenges in accessing resources. The DoD launched the BHMC pilot in response to Senate Report 114-63, which calls for a pilot that addresses the "enhancement of recruitment, retention, readiness, and resilience" of the total force.

WHAT IS THE ROLE OF THE STATE COORDINATOR?

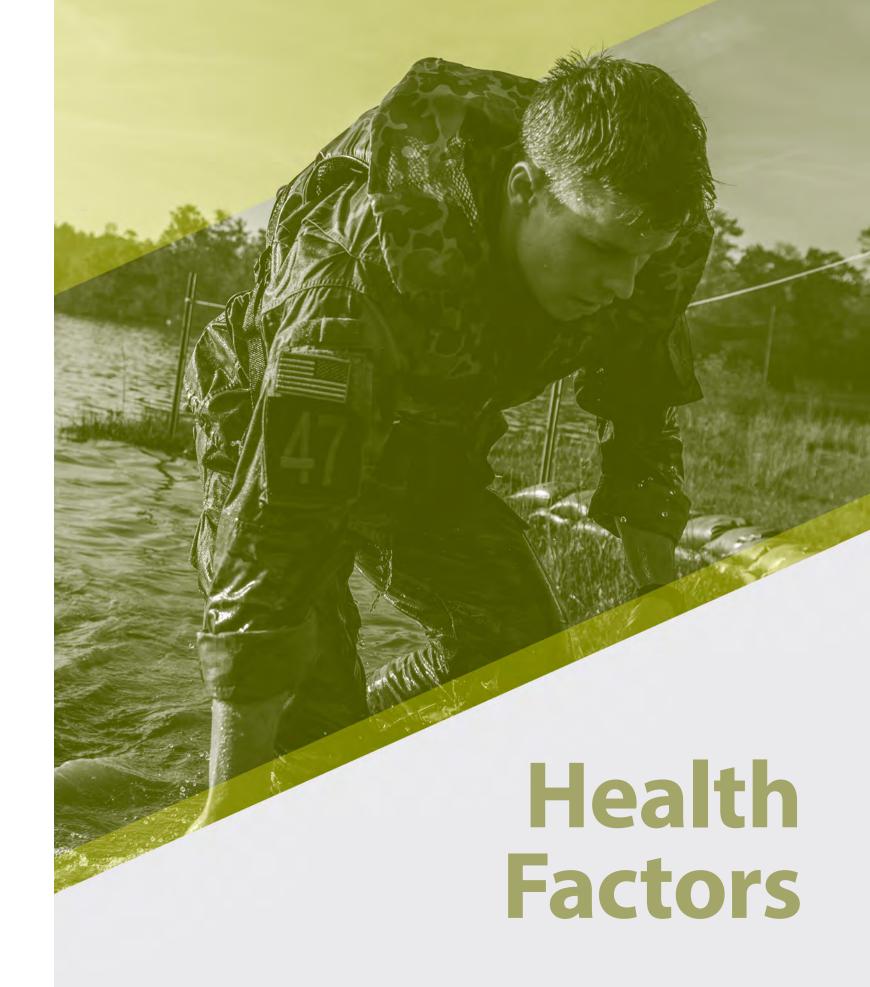
The BHMC State Coordinator's mission is to assist the DoD in identifying and addressing challenges within their state which directly impacts Service member and family readiness. State Coordinators work to develop partnerships in order to improve the navigation of and access to existing military and community resources.

To accomplish this mission, State Coordinators:

- leverage existing community services by ensuring they are part of BHMC's network
- use communication channels to deliver messages to target populations
- inform other military and community resources on the BHMC mission and the challenges faced by our military
- incorporate information on available resources into current training programs and ensure they are listed on the Service Provider Network (SPN)
- report identified challenges, successes, and best practices to the DoD

"Our greatest happiness does not depend on the condition of life in which chance has placed us but is always the result of a good conscience, good health, occupation, and freedom in all just pursuits."

—Thomas Jefferson



Obesity and Overweight

Soldier body composition has a direct influence on the health and readiness of the ARNG Force. Body composition in the overweight to obese range can reduce physical functioning and performance as well as Soldier mental and physical well-being and overall quality of life. The long-term health impacts of excessive body weight include increased risk of heart disease, type 2 diabetes, stroke, hypertension, and certain types of cancer. In 2016, more than one in three U.S. adult civilians (37%) were classified as obese.¹ As Citizen Soldiers, ARNG members face a unique challenge in balancing their ARNG duties with the functions of everyday civilian life (employment, education, and family life) while still striving to maintain and conform to ARNG body composition standards.

The CDC has established BMI ranges for normal (<25), overweight (≥25 and <30), and obese (≥30) derived from the general U.S. adult population to correlate with risk of chronic disease. The Army uses adjusted BMI cut points as described in "Flagged for Weight" on page 34 of this report.

In FY17, 25% of ARNG Soldiers had a BMI of greater than 30 and were classified as obese. The FY17 ARNG Soldier obesity rate was similar to the rate reported in FY16. The proportion of ARNG Soldiers with a BMI in the overweight range (≥25 to <30.0) was 45% in FY17. The ARNG Soldier overweight rate decreased slightly from 46% in FY16. When obesity and overweight were

States/Territories with the Lowest Proportion of ARNG Soldiers Obese, FY17		
1 WISCONSIN	15%	
2 MONTANA	15%	
3 DISTRICT OF COLUMBIA	17%	
4 UTAH	18%	
5 MINNESOTA	19%	
J WIINNESOTA		

examined by sex among ARNG Soldiers in FY17, males had a consistently higher prevalence of both classifications (27% and 47%, respectively) than females (14% and 38%, respectively). In FY17, the prevalence of obesity and overweight was higher among AGR/Mil Tech Solders (30% and 50%, respectively) than Traditional Soldiers (24% and 44%, respectively). In both groups, the likelihood of being overweight or obese increased with age. After adjusting for differences in age and sex distributions across these Soldier types, the prevalence of obesity and overweight was similar across all ARNG Soldier groups.

"Obesity is the leading medical reason young adults are not qualified to serve. Obesity rates among children and young adults have increased dramatically in recent decades. By now most of us have heard that in the past 30 years, child obesity rates have more than tripled."

—MG (Ret.) Paul D. Monroe
United States Army

Reference

1 CDC Web page, https://www.cdc.gov/obesity/data/adult.html (accessed 22 June 2018).



Overall, 25% of ARNG Soldiers were classified as obese.

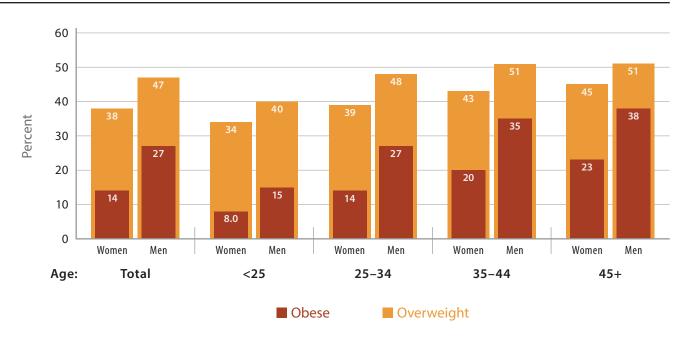
Rates ranged from 15% to 35% across the States and Territories.



Overall, 45% of ARNG Soldiers were classified as overweight.

Rates ranged from 41% to 51% across the States and Territories.

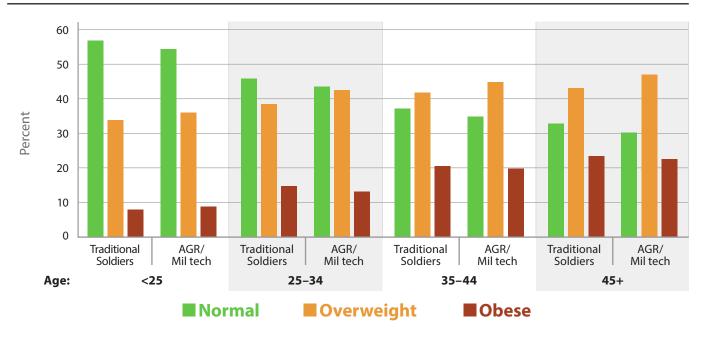
Percent Obese and Overweight by Sex and Age, ARNG Soldiers, FY17



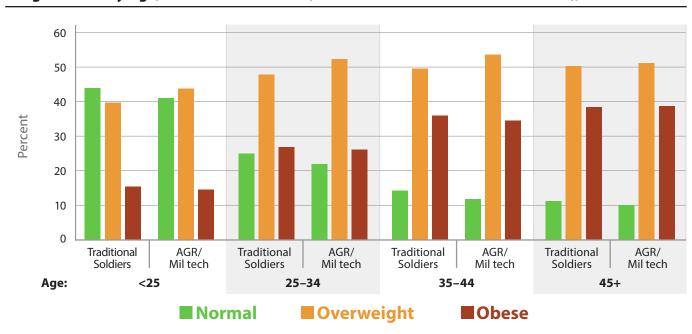
Health Factors

Obesity and Overweight

Weight Status by Age, Female ARNG Soldiers (Traditional Soldiers vs. AGR/Mil Tech), FY17



Weight Status by Age, Male ARNG Soldiers (Traditional Soldiers vs. AGR/Mil Tech), FY17



SPOTLIGHT



INDIANA NATIONAL GUARD PREPARES SOLDIERS FOR A HEALTHIER SERVICE AND RETIREMENT



Since readiness is the military's main focus, and physical readiness issues directly impact it, MG Courtney Carr (Adjutant General, Indiana National Guard (INNG)) established the Indiana Wellness Directorate (IWD). This Directorate comprises a team of subject matter experts

(SME) whose backgrounds range from exercise and nutrition to sustainable health and lifestyle coaching. The IWD ensures a consistent synchronization of evidence-based programs and communication at all levels of support. In creating the IWD, the Indiana National Guard (INNG) focus was to establish the first National Guard-funded Army Wellness Center (AWC). The AWC is modeled after U.S. Army Medical Command's (MEDCOM) 37 AWCs and incorporates their best practices. The AWC offers a personalized health and wellness plan based upon a Soldier's performance on several physiological assessments. These assessments include metabolic measurement, body composition (utilizing Bod Pod®), maximal oxygen consumption (VO2 max) and strength measurements, and coherence measurement of stress. Combined with health educator coaching, these assessments have proven to be valuable tools for long-term lifestyle changes.

FY17 efforts were successful, with approximately 2,200 clients participating in the program and starting their adjusted lifestyle journey. The INNG will continue to meet the challenge of changing the health and wellness culture by developing strategic partnerships throughout Indiana and by opening AWC satellite locations (starting with the Lawrence Armory) to allow for greater access to INNG Soldiers.

Indiana Life Fit

The IWD, as part of the continued effort to improve physical readiness, has helped shape a Life Fit course designed to target Soldiers who are within 1 year of their expiration of term of service (ETS) date and have failed to meet height and weight and/or APFT requirements. Life Fit comprises a10-day move-to-learn class with a 5-day follow-up period that occurs 60 days after the Soldier's initial visit. The Life Fit course provides Soldiers with hands-on AWC experience and addresses topics such as nutrition, mental toughness, physical fitness, strength training, biomechanics, and program design. The Life Fit experience changes Soldiers' lives by providing the education they need at a time when other strategies have been ineffective.

Indiana Life Fit Results for FY17	Unit Record PRE Life-Fit	Unit Record POST Life-Fit
PASS APFT	25%	59%
PASS TAPE TEST	49%	84%

More than 70% of the Life Fit participants who underwent a follow-up assessment at least 60 days after their initial visit experienced an average weight loss of 8 pounds and an average BMI decrease of 1.2 kg/m².

To provide ongoing support for Life Fit graduates, the INNG has implemented a statewide master fitness trainer (MFT) hierarchy that identifies MFTs for each INNG company. These company-level MFTs are crosstrained by SMEs in the IWD and ensure the implementation of Life Fit principles throughout a Soldier's career. In addition to helping Soldiers at the end of their time in service, the INNG is placing IWD-trained MFTs within recruiting and retention operations to help lay the foundation of physical readiness early in the Soldier's career. In FY18, efforts will be made to double the number of Life Fit course participants and continue to refine programs by leveraging community partners and industry experts.

For more information about Life Fit, contact the IWD at 317-247-3300 Ext. 64324 or at NG.INwellness@mail.mil.

Health Factors Flagged for Weight

Flagged for Weight

The Army Body Composition Program (ABCP), as directed by AR 600-9 and DODI 1308.1, requires Soldiers to be physically fit and maintain a healthy, military appearance. According to the ABCP, the maximum allowable body fat threshold is 26% for males and 36% for females (as shown in the BMI Thresholds Table in Appendix I). Following their APFT, Soldiers are required to undergo biannual anthropometric measurements of height and weight in order to calculate BMI. When the allowable BMI is exceeded for sex and age group, circumferential measures (known as the "tape test") of the Soldier's neck, waist, and hips are collected to determine detailed body composition. A Soldier with a relative body fat percentage that exceeds the maximum allowable sex and age standard is "flagged" and is enrolled in the ABCP on the day he or she is notified of the failure. Once enrolled in the ABCP, Soldiers receive exercise guidance, nutrition counseling, and behavioral modification strategies to assist in aligning their body composition with the Army sex and age standards. The ABCP also has an ongoing assessment component that weighs participating Soldiers monthly, with a goal of losing 3 to 8 pounds or 1% body fat per month until the Army sex and age standards are achieved.

In FY17, 4.9% of ARNG Soldiers were flagged for exceeding their maximum allowable weight, and 25% of ARNG Soldiers were classified as being obese (BMI ≥ 30). According to AR 600-9, those Soldiers classified as obese had exceeded the maximal allowable weight for their sex and age group and should have been flagged for a body composition measurement. The ultimate decision to flag Soldiers exceeding their maximum allowable weight is a matter of command discretion, which may account for the difference in the proportion of ARNG Solders who were flagged for weight compared to the proportion classified as obese. The ABCP is built on the ideal of consistent bi-annual anthropometric measurements to assist Soldiers in gauging their height, weight, and body fat and ultimately conforming to Army standards. The potentially inconsistent identification of Soldiers who exceed the maximal allowable threshold may contribute to higher APFT failure rates, higher chronic health conditions, and lower overall Soldier readiness.



Overall, 4.9% of ARNG Soldiers were flagged for exceeding their maximal allowable weight.

Rates ranged from 1.9% to 8.1% across the States and Territories.

Be a Meal Prep MONSTER

Planning your meals for the week in advance can save you time, money, and calories. You can't beat that! Learn how to become a meal prep monster in just five easy steps.





STEP 1: SCOPE OUT YOUR FAVORITE DISHES

Create a list of your go-to recipes to make meal planning a cinch. Choose two to three recipes that have a good balance of protein, carbs, veggies, and healthy fat. Use the chart below to get an idea of how you can mix things up to make a well-balanced meal.

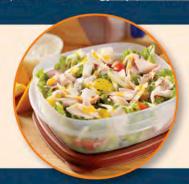
PROTEIN	CARB	VEGGIE	HEALTHY FAT
Chicken	Brown rice	Black beans	Avocado
Fish	Whole wheat pasta	Broccoli	Nuts
Turkey	Whole wheat tortillas	Tomatoes	Olive oil

MASTER TIP: Check out Guard Your Health's #ClassIRecipes for meal ideas: gyh.tips/ClassIRecipes

STEP 2: FIND THE RIGHT CONTAINER

Choose the best way to pack your meals based on your recipe. Pick a container, like one made of portable plastic or glass, that's microwave friendly. Containers with sections will keep your food separated throughout the week if needed.

MASTER TIP: Buy several sturdy single portion storage containers that can be reused each week.





STEP 3: HIT THE GROCERY AISLE

Make your shopping list before leaving home. Buy in bulk to get a better bang for your buck and use any leftover ingredients in future meals. Double check your list before you leave the store!

MASTER TIP: Stock your pantry with basic ingredients, like beans and canned vegetables, you can use anytime

STEP 4: PICK A DAY, ANY DAY

Select a day and block off some time to cook your selected recipes. Gather all the cooking utensils and ingredients you will need before you start cooking. Play some music or put on your favorite show in the background if you want some entertainment while you prep

MASTER TIP: Sundays tend to be a favorite prep day because you get to





STEP 5: THAT'S A WRAP!

Once you're done cooking, portion out the food into several single-serving containers. Mark your meals for lunch or dinner and enjoy them throughout the week!

MASTER TIP: Toss your containers when they become scratched, cracked, or cloudy-looking.



Health Factors Army Physical Fitness Test

Army Physical Fitness Test

One of the cornerstones of military service and Soldier readiness is physical fitness. Soldiers must possess a high level of physical fitness and endurance in order to perform physically demanding tasks in both garrison and deployment conditions. ARNG Soldiers face a unique challenge in maintaining and improving their physical fitness while balancing functions of everyday civilian life. The APFT is designed to assess Soldiers' muscular strength, endurance, and cardiorespiratory fitness. The current AFPT assesses Soldiers based on their performance in three events comprising 2 minutes of push-ups, 2 minutes of sit-ups, and a 2-mile run. The APFT is age- and sex-adjusted and is scored within a range of 0 to 100. To pass the APFT, a minimum score of 60 is required for each event. The ARNG continues to physically train and maintain a readiness posture using the current APFT. The ARNG is in the initial phase of implementing the new Army Combat Fitness Test (ACFT).

In FY17, 12% of ARNG Soldiers failed the APFT, a slight decrease from the FY16 rate of 13%. The FY17 APFT failure rates varied by State, ranging from 4.4% to 17%.

States/Territories with the Lowest Proportion of ARNG Soldiers who Failed the APFT, FY17		
1 UTAH	4.4%	
2 GUAM	5.4%	
3 PUERTO RICO	6.2%	
4 IDAHO	7.4%	
5 SOUTH DAKOTA	7.6%	



Overall, 12% of ARNG Soldiers failed the Army Physical Fitness Test.

Rates ranged from 4.4% to 17% across the States and Territories.

"The key difference is between 'readiness' and fitness. It's one thing to be fit; it's quite another thing to be ready for the things we are being asked to do. And in our case, it's becoming a 'tactical athlete."

> —LTG (Ret.) Mark Hertling, U.S. Army Former Deputy Commanding General for Initial Military Training

GUARD FIT: A Mobile App Designed to Improve Soldier Readiness



Guard Fit, the Army National Guard's app brought to you by Guard Your Health, is designed to help Soldiers stay mission ready year-round and earn the APFT scores they've always wanted. It's a one-stop shop for APFT training with four easy-to-use features: TRACK, TRAIN, COMPETE, and TOOLS. Guard Fit is available for download on Android devices in the Google Play store.

Max your APFT with





groups, and issue

challenges





Want More From Guard Your Health?

you meet your goals

Guard Your Health (www.guardyourhealth.com) is a comprehensive health and medical readiness campaign tailored for ARNG Soldiers and their families that provides access to:























Hazardous Alcohol Use

Hazardous alcohol use can be a warning sign for adverse alcohol-related outcomes, both short- and long-term. Short-term outcomes include driving under the influence (DUI) charges, risky sexual behavior, violence, and injuries. Long-term hazardous alcohol use can lead to increased risk of high blood pressure, heart disease, stroke, liver disease, and digestive problems; increased risk of certain cancers; behavioral health problems; and social problems, including lost productivity, family problems, and unemployment.

The misuse of alcohol not only detracts from individual Soldier and unit readiness but also negatively impacts the lives of ARNG Families and the community. From 2006 to 2010, hazardous alcohol use in the U.S. led to approximately 88,000 civilian deaths and 2.5 million years of potential life lost (YPLL) each year. The lives of those who died were shortened by an average of 30 years.^{1,2} Further, excessive drinking was responsible for 1 in 10 deaths among working-age adults aged 20 to 64 years.^{1,2}

For the FY17 Health of the ARNG Force report, alcohol use habits were measured using the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C), a standardized self-reported survey that is part of the Soldier's PHA questionnaire. The AUDIT-C survey asks Soldiers about the frequency and quantity of their alcohol consumption in order to assess the likelihood that their drinking is adversely affecting their safety. AUDIT-C is a validated screening tool that may indicate hazardous alcohol use, which is distinct from an alcohol dependency disorder diagnosis. Soldiers who screen positive on the AUDIT-C may be referred for alcohol education, the ASAP, Army Substance Use Disorder Clinical Care (SUDCC), or similar interventions to reduce their risk of experiencing a severe adverse alcohol-related outcome such as a DUI charge.

States/Territories with the Lowest Proportion of Hazardous Drinking, ARNG Soldiers, FY17		
1 VIRGINIA	2.6%	
2 UTAH	2.8%	
3 WISCONSIN	3.7%	
4 NEW JERSEY	4.0%	
5 PUERTO RICO	4.1%	

In FY17, 6.4% of ARNG Soldiers reported levels of alcohol use classified as hazardous, a slight decrease from the FY16 reported rate of 7.1%. This decrease in hazardous drinking behavior does not represent a statistically significant change in the rate. Among ARNG Soldiers in FY17, a higher proportion of males (6.5%) than females (5.6%) reported hazardous drinking behavior. Though the proportions of ARNG Soldiers that reported hazardous drinking behavior were similar between sexes, the absolute number of male ARNG Soldiers who reported hazardous drinking behavior was 6 times larger than the number for female ARNG Soldiers. Both the under-25year-old group and the 35-to-44-year-old group had the highest proportion: 6.6%. The age group with the lowest proportion was ARNG Soldiers aged 45 years and older (5.7%). While this is notable, it is was not a statistically significant difference between age groups. The proportion

Content Note: Since the previous edition of the *Health of the ARNG Force* report was published, the DOD has adopted a higher threshold for hazardous drinking. Please see Methods, pg. 108, for more detail.

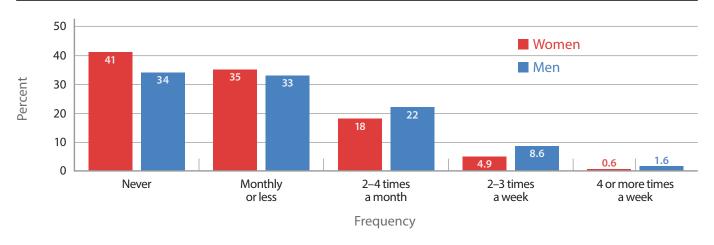
of ARNG Soldiers that reported hazardous drinking behavior did not significantly differ by Soldier type: 6.4% of Traditional Soldiers and 6.0% of AGR/Mil Techs reported behavior consistent with hazardous alcohol use. The proportion of ARNG Soldiers that reported hazardous drinking behavior varied significantly by State, ranging from 2.6% to 19% in FY17.



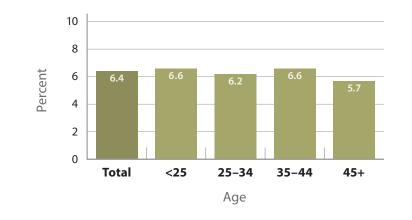
Overall, 6.4% of ARNG Soldiers were classified as exhibiting hazardous levels of alcohol use.

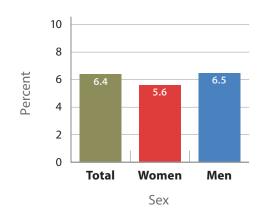
Rates ranged from 2.6% to 19% across the States and Territories.

Frequency of Alcohol Consumption by Sex, ARNG Soldiers, FY17



Percent Classified as Exhibiting Hazardous Levels of Alcohol Use, by Age and Sex, **ARNG Soldiers, FY2017**





¹ CDC. Alcohol-Related Disease Impact (ARDI). Atlanta, GA: CDC.

² Stahre, M., J. Roeber, D. Kanny, R.D. Brewer, and X. Zhang. X. 2014. Contribution of excessive alcohol consumption to deaths and years of potential life lost in the United States. Prev Chronic Dis, 11:130-293.

Tobacco Use

Tobacco use can greatly diminish health and leads to disease, disability, and harm in nearly every organ system of the human body. More than 16 million Americans are living with a disease caused by tobacco use. In the U.S., for every one person who dies due to tobacco use, at least 30 people are living with a serious tobacco-related illness. Additionally, tobacco use has been shown to significantly increase the risk of cancer, heart disease, stroke, diabetes, and chronic obstructive pulmonary disease (COPD). Tobacco use also increases risk for tuberculosis, certain eye diseases, and immune system problems, including rheumatoid arthritis.¹ A more immediate effect of tobacco use on Soldier health and readiness is a demonstrated increased risk of injury in smokers compared to non-smokers. The relationship between tobacco use and injury may be due to an individual's compromised ability to repair damaged tissues.^{2,3}

In FY17, 14% of ARNG Soldiers reported smoking, and 12% reported using smokeless tobacco. The ARNG saw a slight decrease in both smoking (15%) and using smokeless tobacco (13%) from FY16. The reduction in both rates does not represent a statistically significant decrease. In examining tobacco use by Soldier age, a normal distri-

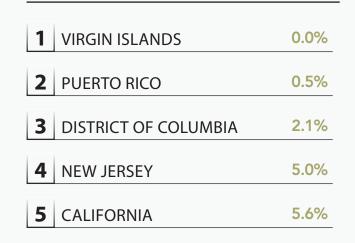
bution is observed with the highest proportion of Soldiers reporting smoking and smokeless tobacco among the 25-to-34 (15% and 13%, respectively) and 35-to-44 (15% and 12%, respectively) year old age groups. Older ARNG Soldiers reported the lowest proportion of tobacco use, with 12% reporting smoking in FY16 and 11% in FY17. There are observable differences in the proportion of ARNG Soldiers' tobacco use by sex, with males reporting higher prevalence of both smoking (14%) and using smokeless tobacco (14%) than females (11% and 1%, respectively). The difference in ARNG smokeless tobacco use between sexes is mirrored in the civilian population where nearly 7% of males and less than 1% of females report using smokeless tobacco.⁴ It is noteworthy that the proportion of male ARNG Soldiers using smokeless tobacco (14%) was approximately twice that of the U.S. male civilian prevalence (7%). Examining tobacco use by Soldier type for FY17 reveals the proportion of Soldiers smoking and using smokeless tobacco did not differ significantly between Traditional (14% and 12%, respectively) and AGR/Mil Tech Soldiers (13% and 14%, respectively). The prevalence of tobacco use varied widely by State, ranging from 2.0% to 21% for smoking and 0% to 22% for smokeless tobacco use.

- 1 CDC Web page. https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm (accessed 22 June 2018).
- 2 Brooks, R., T. Grier, E. Dada, and B. Jones. The Combined Effect of Cigarette Smoking and Fitness on Injury Risk in Men and Women. Nicotine & Tobacco Research [pending publication].
- 3 Grier, T., M. Canham-Chervak, V. McNulty, and B. Jones. 2013. Extreme Conditioning Programs and Injury Risk in a US Army Brigade Combat Team Army Medical Department Journal, PB 8-13-10/11/12: 36-47.
- 4 CDC Web page. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/use_us/index.htm (accessed 22 June 2018).

States/Territories with the Lowest Rate of **Smoking Tobacco Use, FY17**

1	VIRGIN ISLANDS	2.0%
2	UTAH	6.3%
3	FLORIDA	9.4%
4	PUERTO RICO	9.4%
5	DISTRICT OF COLUMBIA	9.5%

States/Territories with the Lowest Rate of **Smokeless Tobacco Use, FY17**





Overall, 14% of ARNG Soldiers reported using smoking tobacco.

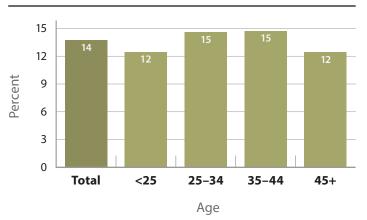
Rates ranged from 2.0% to 21% across the States and Territories.



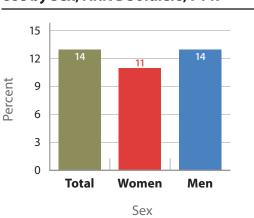
Overall, 12% of ARNG Soldiers reported using smokeless tobacco.

Rates ranged from 0% to 22% across the States and Territories.

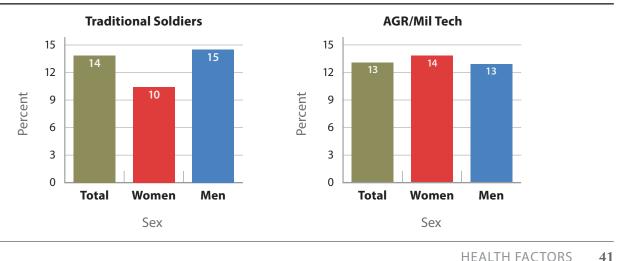
Percent Reporting Smoking Tobacco Use by Age, **ARNG Soldiers, FY17**



Percent Reporting Smoking Tobacco Use by Sex, ARNG Soldiers, FY17

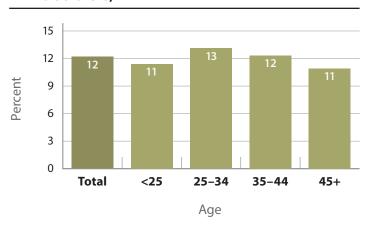


Percent Reporting Smoking Tobacco Use by Soldier Status and Sex (Traditional Soldiers vs. AGR/Mil Tech), FY17

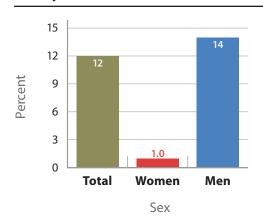


Health Factors Tobacco Use

Percent Reporting Smokeless Tobacco Use by Age, ARNG Soldiers, FY17

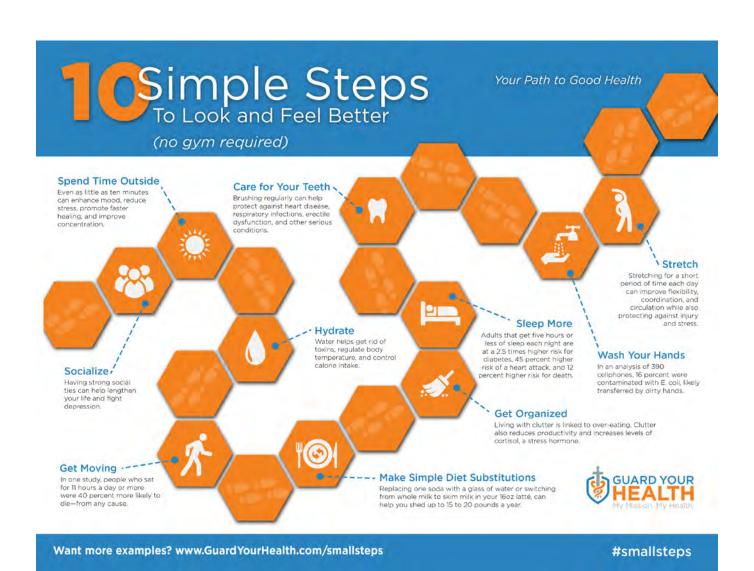


Percent Reporting Smokeless Tobacco Use by Sex, ARNG Soldiers, FY17



Percent Reporting Smokeless Tobacco Use by Soldier Status and Sex (Traditional Soldiers vs. AGR/Mil Tech), FY17





Hypertension/High Blood Pressure

Hypertension, or high blood pressure, usually has no warning signs or symptoms. As a result, many people do not realize they have hypertension until they undergo a blood pressure screening. High blood pressure can greatly diminish health and significantly increase one's risk for heart disease, stroke, and premature death. Several unhealthy behaviors, including tobacco use, eating foods high in sodium and low in potassium, not getting enough physical activity, excessive weight, and excessive alcohol consumption can increase risk for developing hypertension. Cardiovascular health is a key component of a Soldier's holistic health and is an ARNG priority for overall Soldier health and readiness. Measuring blood pressure is a quick, painless, diagnostic screening that Soldiers undergo during their annual PHA physical exam to track cardiovascular health. Strategies for keeping blood pressure levels below the threshold of hypertension (130/80) usually involve reducing dietary sodium, engaging in daily physical activity, quitting smoking, and potentially taking medication.

In FY17, 6.5% of ARNG Soldiers were diagnosed with hypertension. The prevalence of hypertension was nearly twice as high in males (7.0%) compared to females (4.0%). The prevalence of hypertension increases with Soldier age. The lowest prevalence of hypertension was among Soldiers under 25 years of age (0.8%), and the highest prevalence was found among Soldiers aged 45 years and

States/Territories with the Lowest Rate of Hypertension		
1 WISCONSIN	3.4%	
2 ILLINOIS	3.6%	
3 MINNESOTA	3.8%	
4 NEVADA	4.4%	
5 IOWA	4.6%	

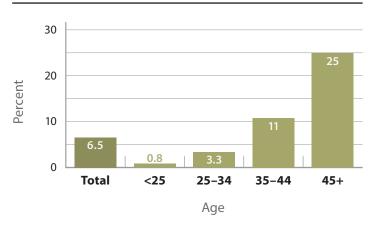
older (25%). The prevalence of hypertension was almost three times higher among AGR/Mil Tech Soldiers (14%) than Traditional Soldiers (5.0%). This difference may be due to the age structure of AGR/Mil Tech versus Traditional Soldiers since the mean age of AGR/Mil Tech Soldiers is 10 years older than that of Traditional Soldiers. The prevalence of hypertension varied by State, ranging from 3.4% to 11% in FY17.



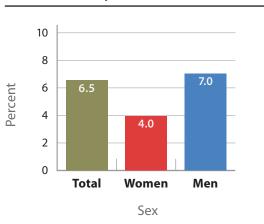
Overall, 6.5% of ARNG Soldiers have hypertension.

Rates ranged from 3.4% to 11% across the States and Territories.

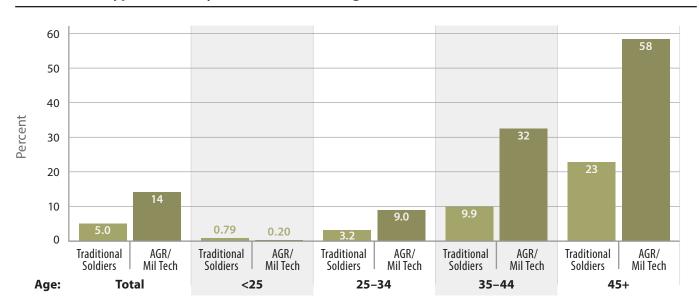
Percent with Hypertension by Age, **ARNG Soldiers, FY17**



Percent with Hypertension by Sex, ARNG Soldiers, FY17



Percent with Hypertension by Soldier Status and Age (Traditional Soldiers vs. AGR/Mil Tech), FY17





Sleep, Activity, and Nutrition

Sleep, activity, and nutrition (SAN), also known as the Performance Triad (P3), forms the foundation of optimal physical, behavioral, and emotional health. Working toward established SAN targets and understanding the interrelationships between SAN elements are critical for maximizing Soldier performance. Neglect of any single SAN domain can lead to suboptimal performance and, in some cases, injury. To address SAN deficiencies, Leaders and Soldiers need information about targets which they failed to meet.

The Global Assessment Tool (GAT) is a survey designed to assess an individual's behaviors with regard to SAN, among other domains. Soldiers are required to complete the GAT per AR 350–53.¹ The data presented here represent the proportions of ARNG GAT respondents meeting expert-defined targets.

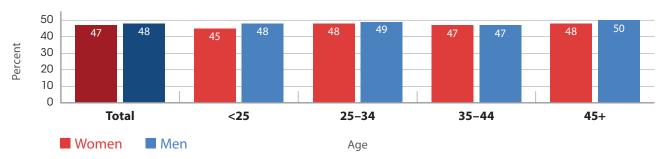


Sleep

Both the CDC² and the National Sleep Foundation³ recommend adults attain 7 or more hours of sleep per night.

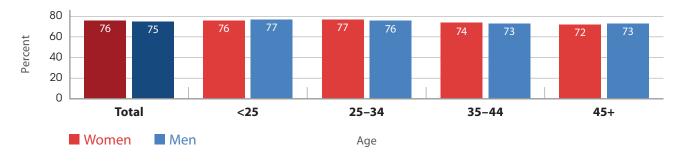
Percent Meeting Weeknight Sleep Target by Sex and Age, ARNG Soldiers, CY17

On weeknights/duty nights, just under half of ARNG Soldiers get 7 or more hours of sleep per night, with slightly more men attaining the target than women.



Percent Meeting Weekend Night Sleep Target by Sex and Age, ARNG Soldiers, CY17

On weekends, three-quarters of ARNG Soldiers get 7 or more hours of sleep; rates are similar across sex and age groups.



2018 HEALTH OF THE ARNG FORCE

PERFORMANCE TRIAD 4

Performance Triad Sleep/Activity/Nutrition

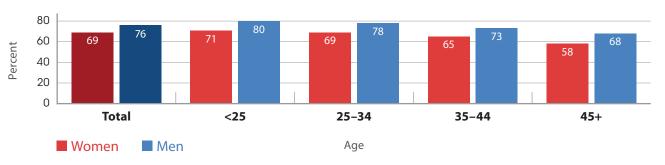


Activity

There are two activity recommendations from the CDC⁴. The first is attaining 2 or more days of resistance training per week.

Percent Meeting Resistance Training Target by Sex and Age, ARNG Soldiers, CY17

Three-quarters of ARNG Soldiers engage in resistance training on 2 or more days per week. Target attainment varies by sex and age groups: 80% of men under 25 get adequate resistance training whereas just under 60% of women over 45 are meet the target.

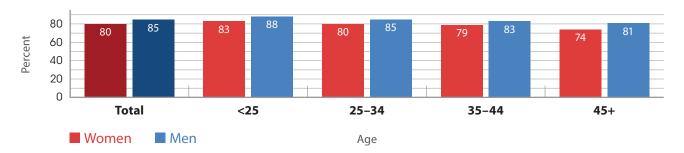


The second CDC activity recommendation is adequate aerobic activity. The amount of activity can be attained in three ways:

- 150 minutes/week of moderate-intensity aerobic activity, or
- 75 minutes/week of vigorous-intensity aerobic activity, or
- An equivalent combination of moderate- and vigorous-intensity aerobic activity.

Percent Meeting Aerobic Activity Target by Sex and Age, ARNG Soldiers, CY17

Nearly 85% of ARNG Soldiers participate in adequate aerobic activity; overall, women meet the target less frequently.





Nutrition targets* were based on U.S. **Department of Agriculture** (USDA) MyPlate⁵ recommendations, as shown in the table.

	Age	Fruit	Vegetables
	19–30 years old	2 cups	2.5 cups
WOMEN	31–50 years old	1.5 cups	2.5 cups
	51+ years old	1.5 cups	2 cups
	19–30 years old	2 cups	3 cups
MEN	31–50 years old	2 cups	3 cups
	51+ years old	2 cups	2.5 cups

^{*} These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within

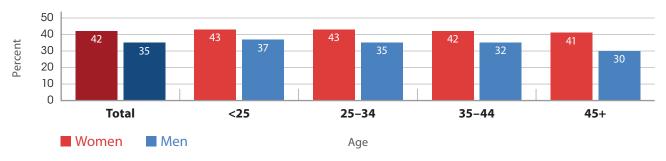
Source: USDA

The GAT serving definition differs slightly from the established MyPlate recommendations, as shown in the table.

GAT		MyPlate	
Fruit	Fresh, frozen, canned or dried, or 100% fruit juices. A serving is 1 cup of fruit or ½ cup of fruit juice.	1 cup of fruit or 100% fruit juice, or ½ cup of dried fruit can be considered as 1 cup from the Fruit Group.	
Vegetables	Fresh, frozen, canned, cooked, or raw. A serving is 1 cup of raw vegetables or ½ cup of cooked vegetables.	1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the Vegetable Group.	

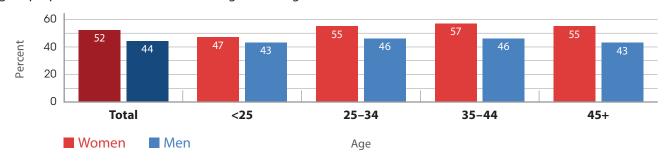
Percent Meeting Fruit Consumption Target by Sex and Age, ARNG Soldiers, CY17

Approximately one-third of ARNG Soldiers eat two or more servings of fruit per day. A higher proportion of women meet the fruit target than men.



Percent Meeting Vegetable Consumption Target by Sex and Age, ARNG Soldiers, CY17

Approximately one-half of ARNG Soldiers eat two or more servings of vegetables per day. A higher proportion of women meet the vegetable target than men.



2018 HEALTH OF THE ARNG FORCE PERFORMANCE TRIAD

Performance Triad Sleep/Activity/Nutrition

Profile Summaries

Summary

Average Statistics in Calendar Year 2017:



of Soldiers attained 7 or more hours of sleep on weeknights on average.



of Soldiers attained 7 or more hours of sleep on weekend nights on average.



of Soldiers engaged in resistance training 2 or more days per week on average.



of Soldiers achieved adequate moderate and/or vigorous aerobic activity targets on average.



of Soldiers ate 2 or more servings of fruit per day on average.



of Soldiers ate 2 or more servings of vegetables per day on average.

- 1 Department of the Army. 2014. Regulation 350-53, Comprehensive Soldier and Family Fitness. http://armypubs.army.mil.
- 2 CDC. 2018. Sleep and Sleep Disorders, https://www.cdc.gov/sleep/index.html. (accessed 23 July 2018).
- 3 National Sleep Foundation Web site. 2018. https://sleepfoundation.org/. (accessed 23 July 2018).
- 4 CDC. 2018. How much physical activity do adults need? https://www.cdc.gov/physicalactivity/basics/adults/index.htm. (accessed 23 July 2018).
- 5 USDA. 2018. Choose MyPlate Web site, https://www.choosemyplate.gov/. (accessed 23 July 2018).

ARNG Health Index Ranking by State and Territory

ARNG Health Index scores take into account Medical Readiness, Dental Readiness, Hearing Readiness, Obesity, APFT Failures, Hypertension, Illicit Substance Use, Smokeless Tobacco, Smoked Tobacco, Hazardous Alcohol Use, and indicators of PTSD and Depression.

1. **Utah**

2. **Puerto Rico**

3. Virgin Islands

South Dakota

Wisconsin

Nevada

Connecticut

Ohio

Idaho

10. New Jersey

11. Florida

12. New York

13. Arizona

14. Hawaii

15. Wyoming

16. **Colorado**

17. North Dakota

18. Rhode Island

19. **lowa**

20. Montana

21. West Virginia

22. New Hampshire

23. District of Columbia

24. Maine

25. Nebraska

26. Illinois

27. Maryland

28. Minnesota

29. Alabama

30. Missouri

31. Virginia

32. **Delaware** 33. Indiana

34. Massachusetts

35. Alaska

36. South Carolina

37. **Kentucky**

38. **Tennessee**

39. New Mexico

40. Pennsylvania

41. Oklahoma

42. California

43. Kansas

44. North Carolina

45. Michigan

46. Vermont

47. Washington

48. Arkansas

49. **Georgia**

50. **Oregon**

51. Mississippi

52. **Texas**

53. Louisiana

54. **Guam**

► Alabama

Army National Guard

Profile (2017)*

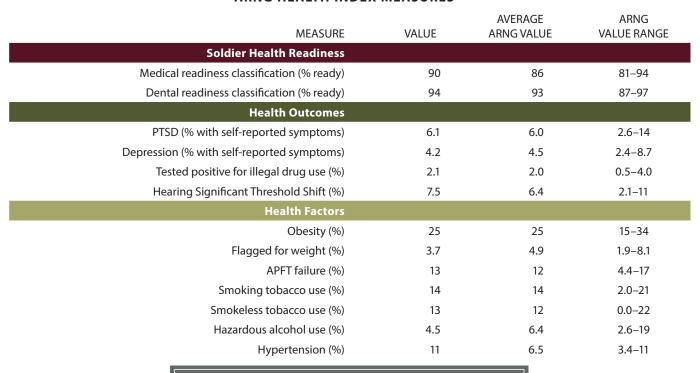
End-Strength: 8,800 (18% Female)

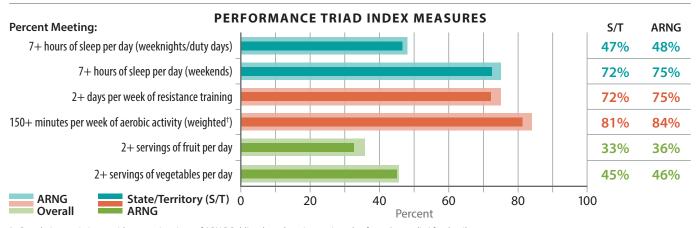
AGR/Mil Tech: 17%

State Population: 4,800,000 (1.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 29 / 54

ARNG HEALTH INDEX MEASURES**





ARNG Health Index Score*** **40–49th percentile**

- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Alaska

Army National Guard

Profile (2017)*

End-Strength: 1,600 (18% Female)

AGR/Mil Tech: 38%

State Population: 710,000 (2.2 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 35 / 54

ARNG HEALTH INDEX MEASURES**			
MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	89	86	81–94
Dental readiness classification (% ready)	93	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	7.9	6.0	2.6–14
Depression (% with self-reported symptoms)	6.8	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.2	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	3.6	6.4	2.1–11
Health Factors			
Obesity (%)	22	25	15–34
Flagged for weight (%)	5.7	4.9	1.9-8.1
APFT failure (%)	9.9	12	4.4-17
Smoking tobacco use (%)	14	14	2.0-21
Smokeless tobacco use (%)	14	12	0.0-22

ARNG Health Index Score*** **30–39th percentile**

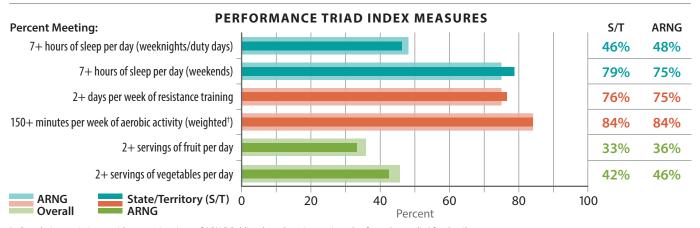
6.5

6.4

6.5

2.6 - 19

3.4-11



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.

Hazardous alcohol use (%)

Hypertension (%)

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

Arizona

Army National Guard

Profile (2017)*

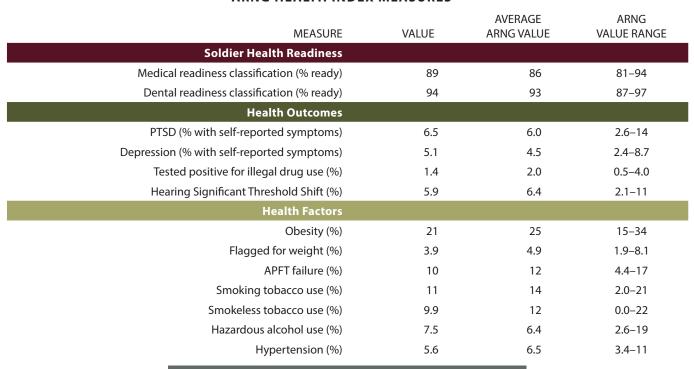
End-Strength: 5,100 (16% Female)

AGR/Mil Tech: 19%

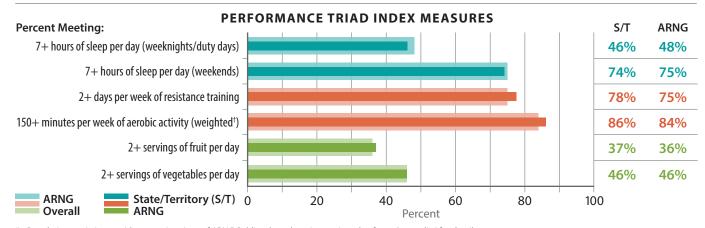
State Population: 6,900,000 (0.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 13 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **70–79th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Arkansas

Army National Guard

Profile (2017)*

End-Strength: 6,100 (15% Female)

AGR/Mil Tech: 18%

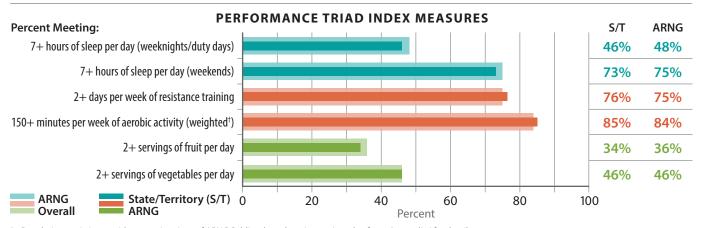
State Population: 2,900,000 (2.1 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 48 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
	Medical readiness classification (% ready)	87	86	81–94
_	Dental readiness classification (% ready)	96	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	6.2	6.0	2.6–14
	Depression (% with self-reported symptoms)	5.4	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	2.5	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	7.3	6.4	2.1–11
	Health Factors			
	Obesity (%)	28	25	15–34
	Flagged for weight (%)	5.9	4.9	1.9-8.1
	APFT failure (%)	14	12	4.4–17
	Smoking tobacco use (%)	19	14	2.0-21
	Smokeless tobacco use (%)	17	12	0.0-22
	Hazardous alcohol use (%)	7.3	6.4	2.6–19
	Hypertension (%)	8.8	6.5	3.4–11

ARNG Health Index Score*** 10–19th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

California

Army National Guard

Profile (2017)*

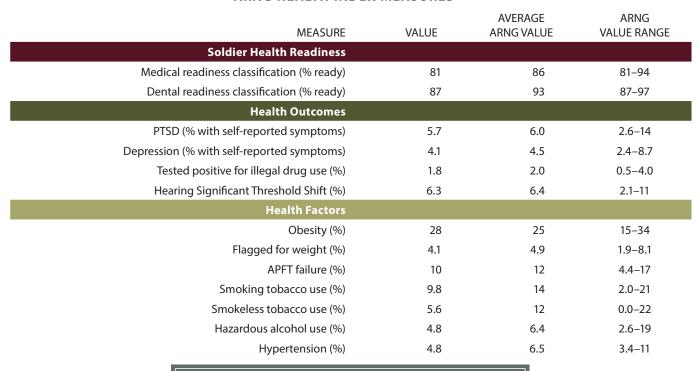
End-Strength: 13,000 (16% Female)

AGR/Mil Tech: 14%

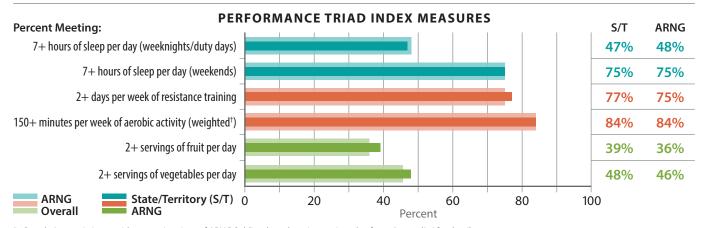
State Population: 39,000,000 (0.3 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 42 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **20–29th percentile**



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Colorado

Army National Guard

Profile (2017)*

End-Strength: 3,900 (17% Female)

AGR/Mil Tech: 20%

State Population: 5,500,000 (0.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 16 / 54

ARNG HEALTH INDEX MEASURES**			
MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	88	86	81–94
Dental readiness classification (% ready)	96	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	7.2	6.0	2.6–14
Depression (% with self-reported symptoms)	5.2	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.7	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	9.5	6.4	2.1–11
Health Factors			
Obesity (%)	19	25	15–34
Flagged for weight (%)	3.4	4.9	1.9-8.1
APFT failure (%)	8.4	12	4.4-17
Smoking tobacco use (%)	12	14	2.0-21
Smokeless tobacco use (%)	14	12	0.0-22

ARNG Health Index Score*** 70-79th percentile

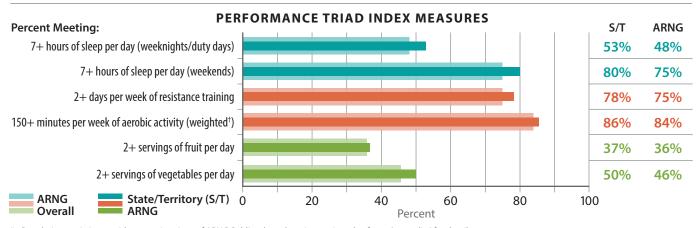
5.9

6.4

6.5

2.6-19

3.4-11



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations)

Hazardous alcohol use (%)

Hypertension (%)

[†] Please see page 48 for a description of the aerobic activity target.

Connecticut

Army National Guard

Profile (2017)*

End-Strength: 3,500 (16% Female)

AGR/Mil Tech: 22%

State Population: 3,600,000 (1.0 ARNG Soldiers per 1,000 population)

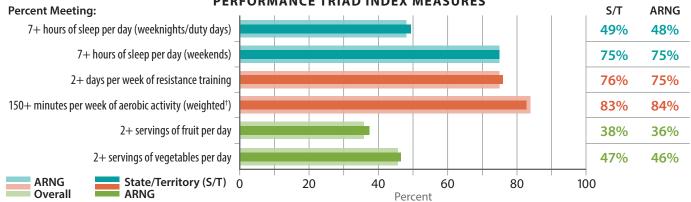
ARNG Health Index Ranking: 7 / 54

ARNG HEALTH INDEX MEASURES**

MEASU	RE VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readine	ss		
Medical readiness classification (% read	ly) 89	86	81–94
Dental readiness classification (% read	y) 94	93	87–97
Health Outcom	es		
PTSD (% with self-reported sympton	ns) 6.5	6.0	2.6–14
Depression (% with self-reported sympton	ns) 3.6	4.5	2.4-8.7
Tested positive for illegal drug use (%) 2.2	2.0	0.5-4.0
Hearing Significant Threshold Shift (%) 3.4	6.4	2.1–11
Health Facto	rs		
Obesity (%) 21	25	15–34
Flagged for weight (%) 5.3	4.9	1.9-8.1
APFT failure (%) 11	12	4.4–17
Smoking tobacco use (%) 11	14	2.0-21
Smokeless tobacco use (%) 6.3	12	0.0-22
Hazardous alcohol use (%) 5.5	6.4	2.6–19
Hypertension (%) 5.6	6.5	3.4–11

ARNG Health Index Score*** 80–89th percentile

PERFORMANCE TRIAD INDEX MEASURES



- $^* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.}$
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

▶ Delaware

Army National Guard

Profile (2017)*

End-Strength: 1,400 (19% Female)

AGR/Mil Tech: 23%

State Population: 950,000 (1.4 ARNG Soldiers per 1,000 population)

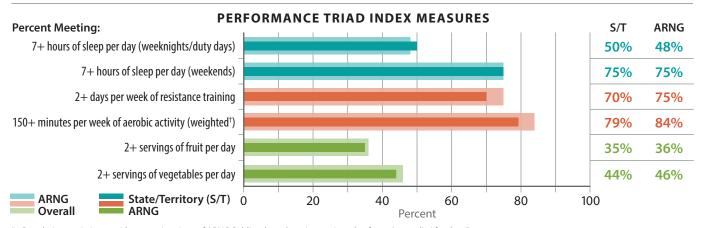
ARNG Health Index Ranking: 32 / 54

ARNG HEALTH INDEX MEASURES**



MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	85	86	81–94
Dental readiness classification (% ready)	92	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.0	6.0	2.6–14
Depression (% with self-reported symptoms)	3.6	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.1	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	6.5	6.4	2.1–11
Health Factors			
Obesity (%)	29	25	15-34
Flagged for weight (%)	4.1	4.9	1.9-8.1
APFT failure (%)	14	12	4.4–17
Smoking tobacco use (%)	11	14	2.0-21
Smokeless tobacco use (%)	5.7	12	0.0–22
Hazardous alcohol use (%)	5.4	6.4	2.6–19
Hypertension (%)	9.0	6.5	3.4–11

ARNG Health Index Score*** 40–49th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

District of Columbia

Army National Guard

Profile (2017)*

End-Strength: 470 (27% Female)

AGR/Mil Tech: 15%

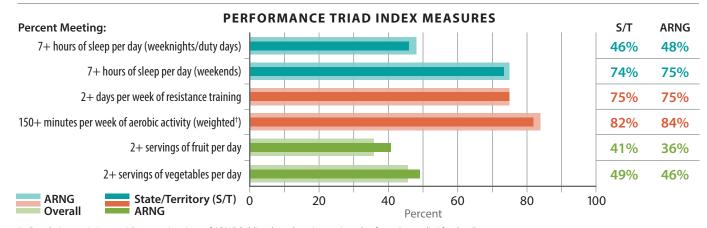
State Population: 690,000 (0.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 23 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	81	86	81–94
Dental readiness classification (% ready)	90	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.1	6.0	2.6–14
Depression (% with self-reported symptoms)	3.2	4.5	2.4-8.7
Tested positive for illegal drug use (%)	3.0	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	6.9	6.4	2.1–11
Health Factors			
Obesity (%)	17	25	15–34
Flagged for weight (%)	3.9	4.9	1.9-8.1
APFT failure (%)	9.3	12	4.4-17
Smoking tobacco use (%)	9.5	14	2.0-21
Smokeless tobacco use (%)	2.1	12	0.0-22
Hazardous alcohol use (%)	7.8	6.4	2.6–19
Hypertension (%)	4.7	6.5	3.4–11

ARNG Health Index Score*** **50–59th percentile**



- $^* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.}$
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Florida

Army National Guard

Profile (2017)*

End-Strength: 9,400 (16% Female)

AGR/Mil Tech: 12%

State Population: 21,000,000 (0.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 11 / 54

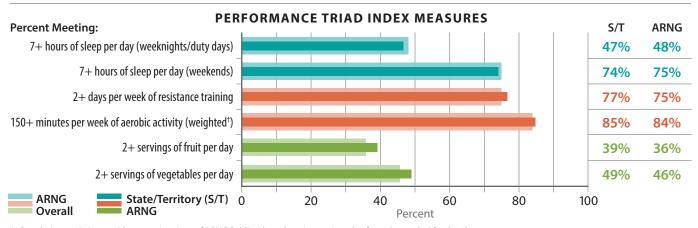
ARNG HEALTH INDEX MEASURES**



AV/EDACE

	MEACURE	\/A	AVERAGE	ARNG
	MEASURE	VALUE	ARNG VALUE	VALUE RANGE
	Soldier Health Readiness			
N	Medical readiness classification (% ready)	88	86	81–94
	Dental readiness classification (% ready)	95	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	5.5	6.0	2.6–14
Depr	ression (% with self-reported symptoms)	4.3	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	1.6	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	8.6	6.4	2.1–11
	Health Factors			
	Obesity (%)	24	25	15–34
	Flagged for weight (%)	3.7	4.9	1.9-8.1
	APFT failure (%)	9.4	12	4.4–17
	Smoking tobacco use (%)	9.4	14	2.0-21
	Smokeless tobacco use (%)	8.7	12	0.0-22
	Hazardous alcohol use (%)	4.9	6.4	2.6–19
	Hypertension (%)	6.3	6.5	3.4–11

ARNG Health Index Score*** **70–79th percentile**



- $* \ \ Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

► **Georgia**Army National Guard

Profile (2017)*

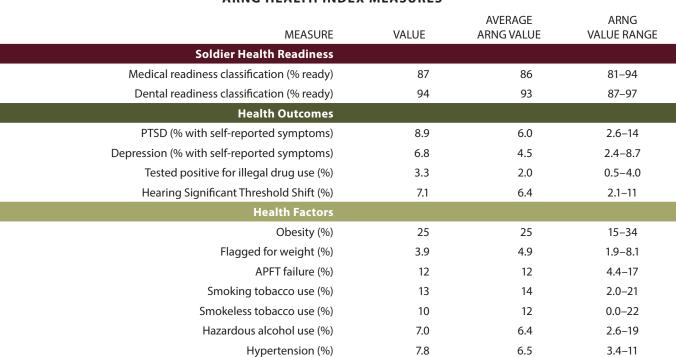
End-Strength: 11,000 (21% Female)

AGR/Mil Tech: 13%

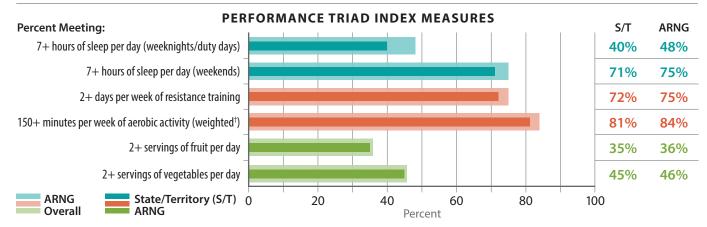
State Population: 10,000,000 (1.0 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 49 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** <10th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

▶ Guam

Army National Guard

Profile (2017)*

End-Strength: 1,000 (18% Female)

AGR/Mil Tech: 24%

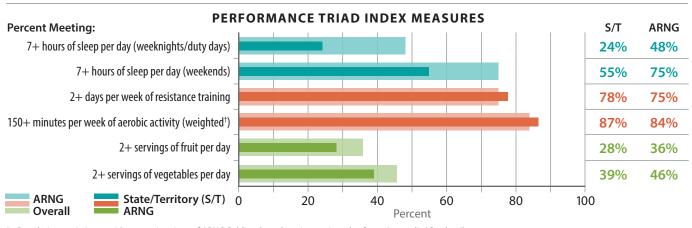
State Population: 160,000 (6.4 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 54 / 54

ARNG HEALTH INDEX MEASURES**



	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Hea	lth Readiness			
Medical readiness classific	ation (% ready)	86	86	81–94
Dental readiness classific	ation (% ready)	94	93	87–97
Hea	olth Outcomes			
PTSD (% with self-repo	rted symptoms)	14	6.0	2.6–14
Depression (% with self-repo	rted symptoms)	8.7	4.5	2.4-8.7
Tested positive for illeg	gal drug use (%)	0.6	2.0	0.5-4.0
Hearing Significant Thr	eshold Shift (%)	9.2	6.4	2.1–11
	Health Factors			
	Obesity (%)	35	25	15-34
Flagge	d for weight (%)	3.8	4.9	1.9-8.1
	APFT failure (%)	5.4	12	4.4–17
Smoking t	cobacco use (%)	21	14	2.0-21
Smokeless t	obacco use (%)	21	12	0.0-22
Hazardous	alcohol use (%)	19	6.4	2.6–19
Hy	pertension (%)	8.9	6.5	3.4–11



ARNG Health Index Score*** <10th percentile

- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Hawaii

Army National Guard

Profile (2017) *

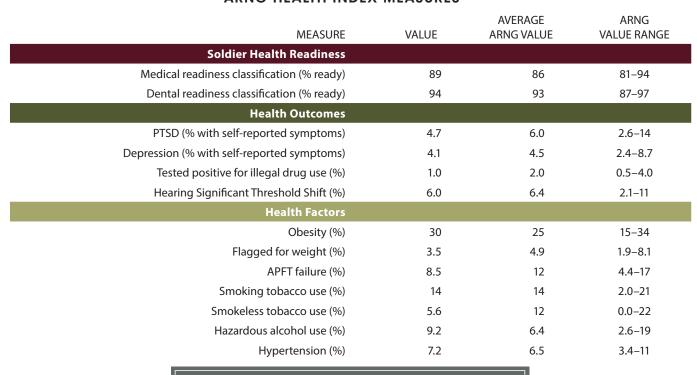
End-Strength: 2,900 (17% Female)

AGR/Mil Tech: 20%

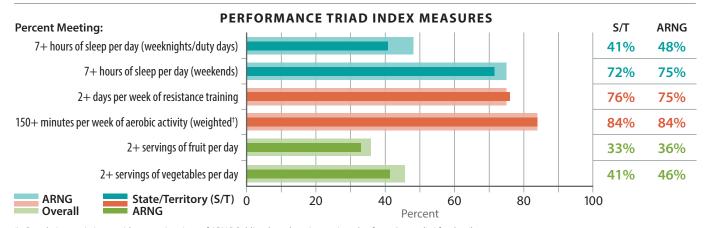
State Population: 1,400,000 (2.1 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 14 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **70–79th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Idaho

Army National Guard

Profile (2017)*

End-Strength: 2,800 (12% Female)

AGR/Mil Tech: 29%

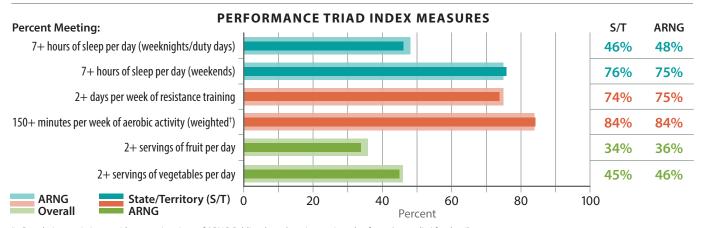
State Population: 1,700,000 (1.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 9 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
	Medical readiness classification (% ready)	85	86	81–94
_	Dental readiness classification (% ready)	94	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	6.4	6.0	2.6–14
	Depression (% with self-reported symptoms)	4.5	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	1.7	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	3.3	6.4	2.1–11
	Health Factors			
	Obesity (%)	21	25	15–34
	Flagged for weight (%)	1.9	4.9	1.9-8.1
	APFT failure (%)	7.4	12	4.4–17
	Smoking tobacco use (%)	13	14	2.0–21
	Smokeless tobacco use (%)	15	12	0.0–22
	Hazardous alcohol use (%)	7.6	6.4	2.6–19
	Hypertension (%)	5.7	6.5	3.4–11

ARNG Health Index Score*** **80–89th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

of the aerobic activity target.

[†] Please see page 48 for a description of the aerobic activity target.

Illinois

Army National Guard

Profile (2017)*

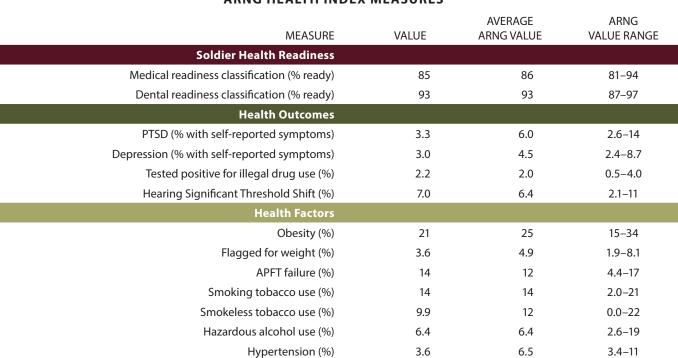
End-Strength: 9,600 (18% Female)

AGR/Mil Tech: 14%

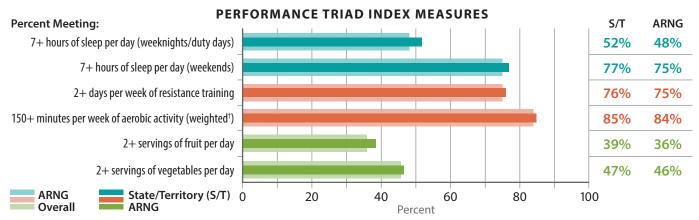
State Population: 13,000,000 (0.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 26 / 54





ARNG Health Index Score*** **50–59th percentile**



^{*} Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.

► Indiana

Army National Guard

Profile (2017)*

End-Strength: 10,000 (16% Female)

AGR/Mil Tech: 14%

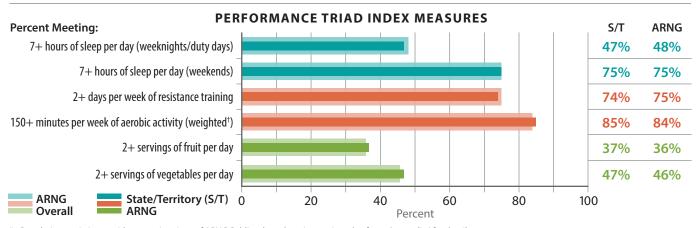
State Population: 6,500,000 (1.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 33 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
•	Medical readiness classification (% ready)	86	86	81–94
_	Dental readiness classification (% ready)	94	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	4.6	6.0	2.6–14
	Depression (% with self-reported symptoms)	4.2	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	3.5	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	3.4	6.4	2.1–11
	Health Factors			
	Obesity (%)	24	25	15–34
	Flagged for weight (%)	7.5	4.9	1.9-8.1
	APFT failure (%)	15	12	4.4–17
	Smoking tobacco use (%)	18	14	2.0–21
	Smokeless tobacco use (%)	15	12	0.0-22
	Hazardous alcohol use (%)	6.3	6.4	2.6–19
	Hypertension (%)	5.1	6.5	3.4–11

ARNG Health Index Score*** **30–39th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{**} See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

▶ lowa

Army National Guard

Profile (2017)*

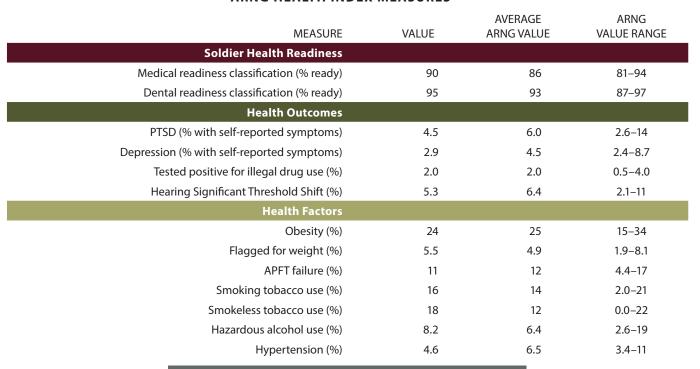
End-Strength: 6,100 (14% Female)

AGR/Mil Tech: 17%

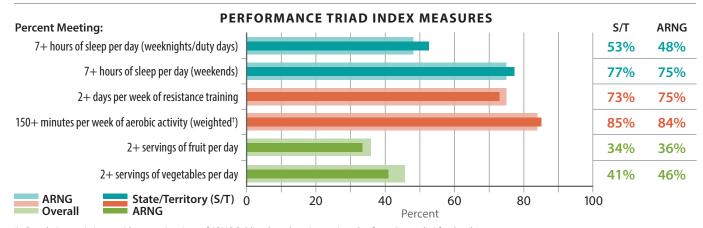
State Population: 3,100,000 (2.0 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 19 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** 60–69th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Kansas

Army National Guard

Profile (2017)*

End-Strength: 4,400 (14% Female)

AGR/Mil Tech: 19%

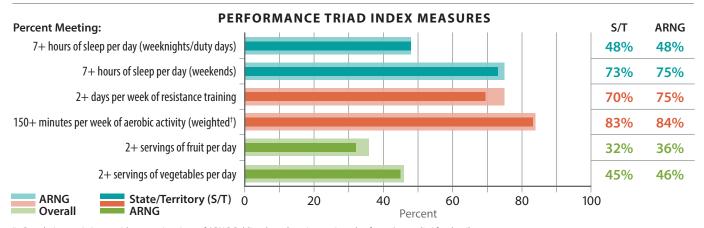
State Population: 2,900,000 (1.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 43 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	86	86	81–94
Dental readiness classification (% ready)	93	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.9	6.0	2.6–14
Depression (% with self-reported symptoms)	3.8	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.2	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	5.6	6.4	2.1–11
Health Factors			
Obesity (%)	30	25	15–34
Flagged for weight (%)	7.9	4.9	1.9-8.1
APFT failure (%)	14	12	4.4–17
Smoking tobacco use (%)	19	14	2.0-21
Smokeless tobacco use (%)	19	12	0.0–22
Hazardous alcohol use (%)	7.9	6.4	2.6–19
Hypertension (%)	8.8	6.5	3.4–11

ARNG Health Index Score*** 20–29th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.





Kentucky Army National Guard

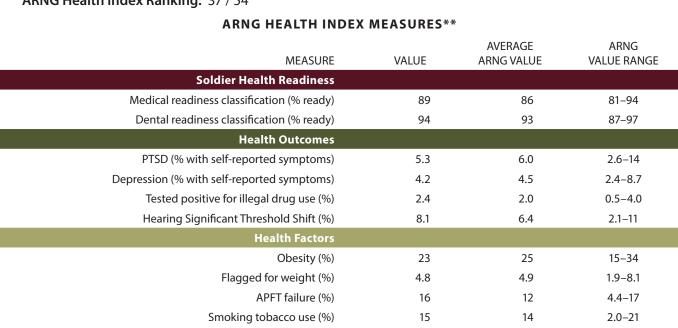
Profile (2017) *

End-Strength: 6,200 (13% Female)

AGR/Mil Tech: 16%

State Population: 4,400,000 (1.4 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 37 / 54



ARNG Health Index Score*** **30–39th percentile**

19

5.3

6.9

12

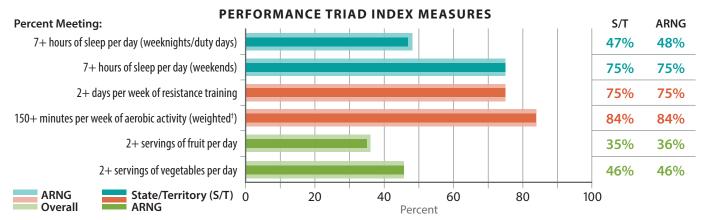
6.4

6.5

0.0 - 22

2.6-19

3.4-11



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

Smokeless tobacco use (%)

Hazardous alcohol use (%)

Hypertension (%)

† Please see page 48 for a description of the aerobic activity target.

Louisiana

Army National Guard

Profile (2017)*

End-Strength: 8,400 (19% Female)

AGR/Mil Tech: 16%

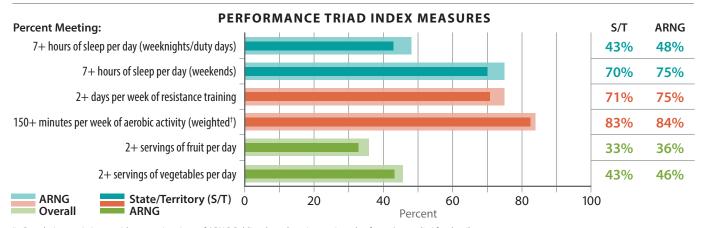
State Population: 4,600,000 (1.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 53 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	86	86	81–94
Dental readiness classification (% ready)	93	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	9.1	6.0	2.6–14
Depression (% with self-reported symptoms)	6.9	4.5	2.4-8.7
Tested positive for illegal drug use (%)	4.0	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	10	6.4	2.1–11
Health Factors			
Obesity (%)	28	25	15–34
Flagged for weight (%)	4.9	4.9	1.9-8.1
APFT failure (%)	17	12	4.4–17
Smoking tobacco use (%)	19	14	2.0–21
Smokeless tobacco use (%)	11	12	0.0–22
Hazardous alcohol use (%)	6.7	6.4	2.6–19
Hypertension (%)	8.0	6.5	3.4–11

ARNG Health Index Score*** <10th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations)

[†] Please see page 48 for a description of the aerobic activity target.

Maine

Army National Guard

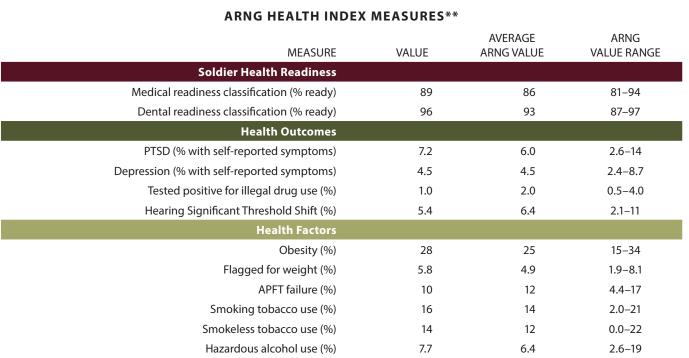
Profile (2017) *

End-Strength: 1,900 (13% Female)

AGR/Mil Tech: 22%

State Population: 1,300,000 (1.4 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 24 / 54



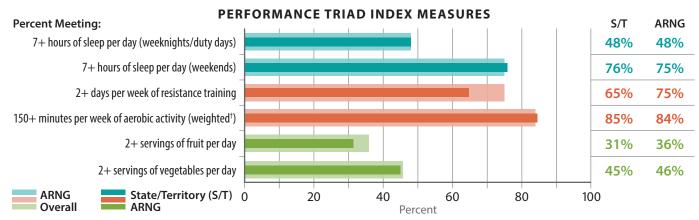
ARNG Health Index Score*** **50–59th percentile**

7.0

6.5

3.4-11

Hypertension (%)



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Maryland Army National Guard

Profile (2017)*

End-Strength: 4,800 (19% Female)

AGR/Mil Tech: 18%

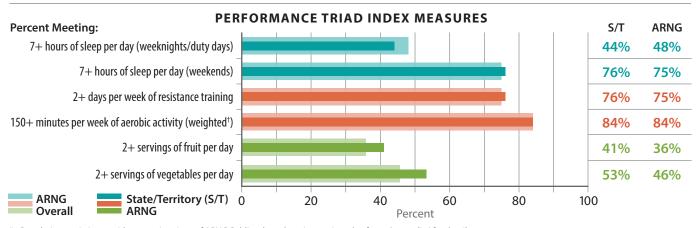
State Population: 5,900,000 (0.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 27 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness	WILDE	Alliva Wilde	WILDE WINGE
	Medical readiness classification (% ready)	85	86	81–94
	Dental readiness classification (% ready)	91	93	87–97
ı	Health Outcomes			
	PTSD (% with self-reported symptoms)	6.0	6.0	2.6–14
	Depression (% with self-reported symptoms)	3.8	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	1.5	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	6.8	6.4	2.1–11
	Health Factors			
	Obesity (%)	24	25	15–34
	Flagged for weight (%)	3.7	4.9	1.9-8.1
	APFT failure (%)	11	12	4.4–17
	Smoking tobacco use (%)	11	14	2.0-21
	Smokeless tobacco use (%)	6.4	12	0.0-22
	Hazardous alcohol use (%)	5.6	6.4	2.6–19
	Hypertension (%)	8.9	6.5	3.4–11

ARNG Health Index Score*** **50–59th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

Massachusetts

Army National Guard

Profile (2017)*

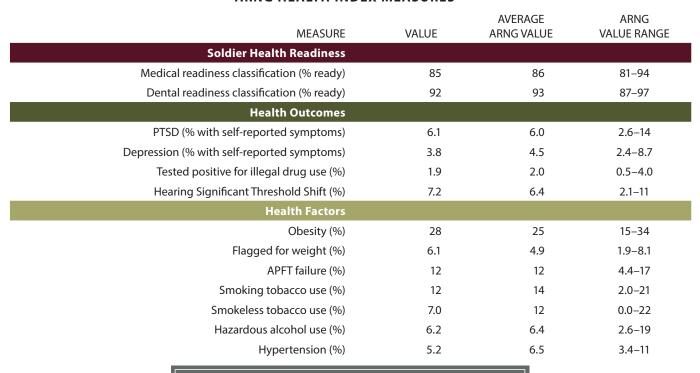
End-Strength: 5,400 (14% Female)

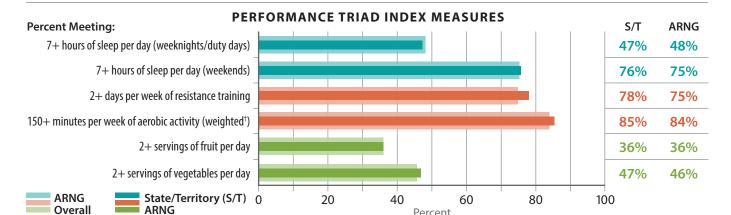
AGR/Mil Tech: 15%

State Population: 6,800,000 (0.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 34 / 54

ARNG HEALTH INDEX MEASURES**





ARNG Health Index Score*** **30–39th percentile**

- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Michigan Army National Guard

Profile (2017)*

End-Strength: 7,300 (15% Female)

AGR/Mil Tech: 17%

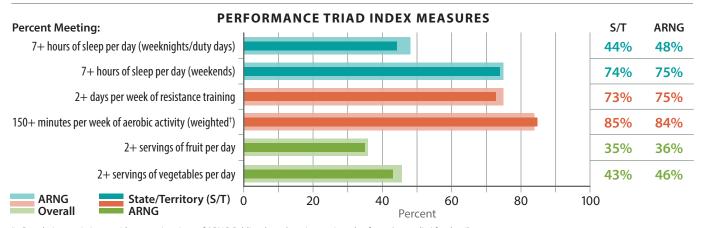
State Population: 9,900,000 (0.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 45 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
	Medical readiness classification (% ready)	87	86	81–94
_	Dental readiness classification (% ready)	94	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	6.1	6.0	2.6–14
	Depression (% with self-reported symptoms)	5.2	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	2.6	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	7.5	6.4	2.1–11
	Health Factors			
	Obesity (%)	25	25	15–34
	Flagged for weight (%)	7.1	4.9	1.9-8.1
	APFT failure (%)	17	12	4.4-17
	Smoking tobacco use (%)	17	14	2.0-21
	Smokeless tobacco use (%)	15	12	0.0-22
	Hazardous alcohol use (%)	6.0	6.4	2.6–19
	Hypertension (%)	5.3	6.5	3.4–11

ARNG Health Index Score*** 10–19th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.



► Minnesota

Army National Guard

Profile (2017)*

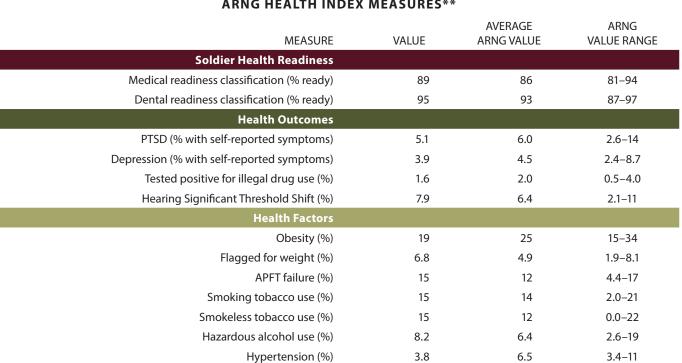
End-Strength: 9,800 (17% Female)

AGR/Mil Tech: 13%

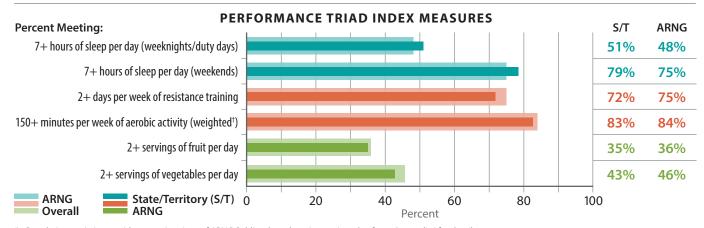
State Population: 5,400,000 (1.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 28 / 54





ARNG Health Index Score*** 40-49th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Mississippi **Army National Guard**

Profile (2017)*

End-Strength: 8,200 (16% Female)

AGR/Mil Tech: 22%

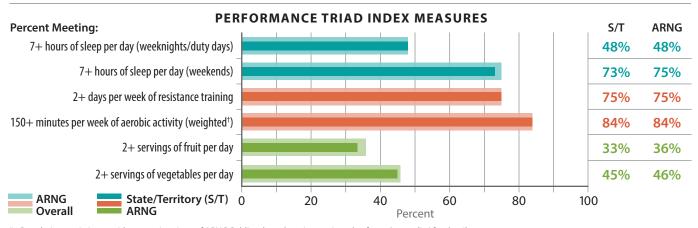
State Population: 2,900,000 (2.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 51 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness	WESE	Alliva VALOE	WILDE HANGE
Medical readiness classification (% ready)	82	86	81–94
Dental readiness classification (% ready)	91	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.6	6.0	2.6–14
Depression (% with self-reported symptoms)	5.0	4.5	2.4-8.7
Tested positive for illegal drug use (%)	4.0	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	7.6	6.4	2.1–11
Health Factors			
Obesity (%)	30	25	15–34
Flagged for weight (%)	3.6	4.9	1.9-8.1
APFT failure (%)	14	12	4.4–17
Smoking tobacco use (%)	17	14	2.0–21
Smokeless tobacco use (%)	15	12	0.0–22
Hazardous alcohol use (%)	5.3	6.4	2.6–19
Hypertension (%)	8.9	6.5	3.4–11

ARNG Health Index Score*** <10th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations)

[†] Please see page 48 for a description of the aerobic activity target.

Missouri

Army National Guard

Profile (2017)*

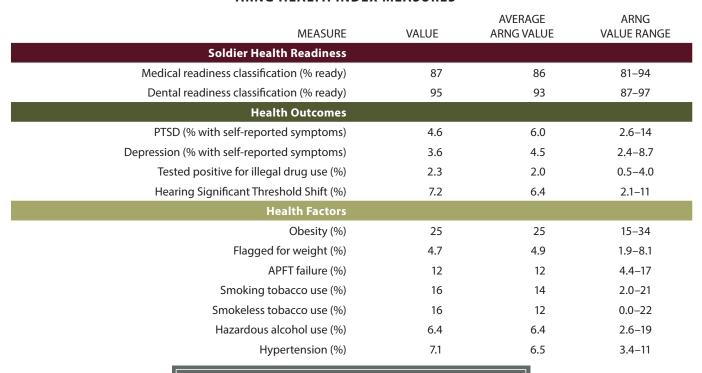
End-Strength: 8,800 (14% Female)

AGR/Mil Tech: 18%

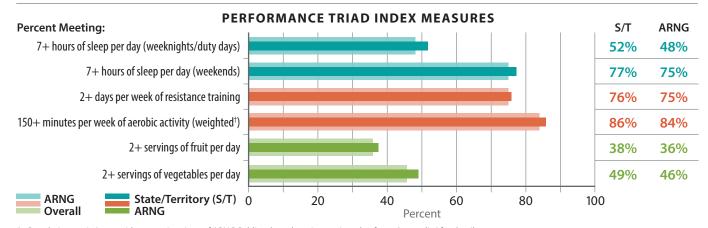
State Population: 5,900,000 (1.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 30 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** 40–49th percentile



 $^{* \}quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$

► Montana

Army National Guard

Profile (2017)*

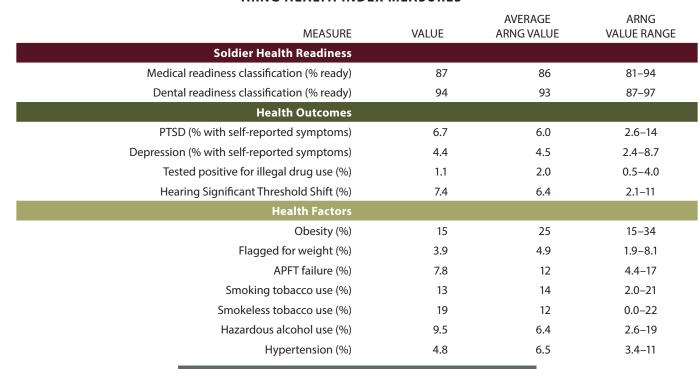
End-Strength: 2,400 (18% Female)

AGR/Mil Tech: 23%

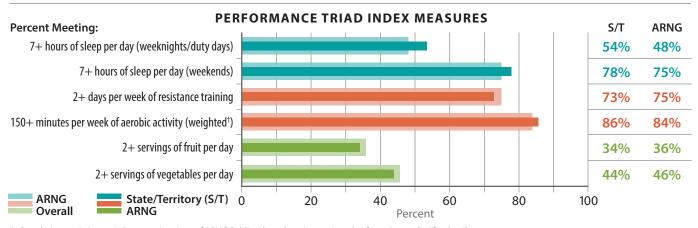
State Population: 1,000,000 (2.3 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 20 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **60–69th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).



^{**} See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

[†] Please see page 48 for a description of the aerobic activity target.

▶ Nebraska

Army National Guard

Profile (2017)*

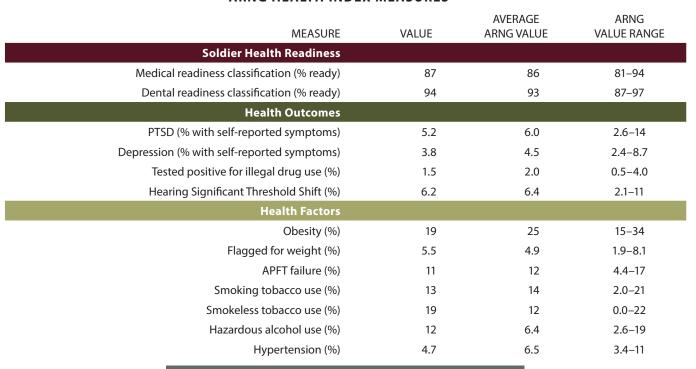
End-Strength: 3,300 (14% Female)

AGR/Mil Tech: 21%

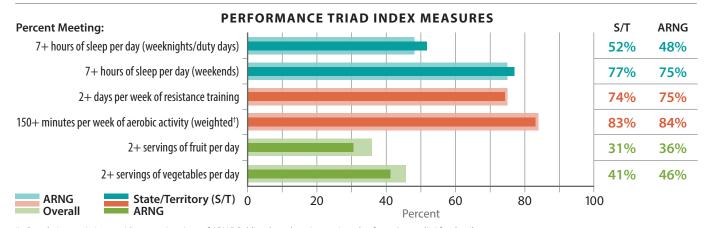
State Population: 1,900,000 (1.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 25 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **50–59th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.



Profile (2017)*

End-Strength: 2,800 (21% Female)

AGR/Mil Tech: 17%

State Population: 2,900,000 (0.9 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 6 / 54

ARNG HEALTH INDEX MEASURES**

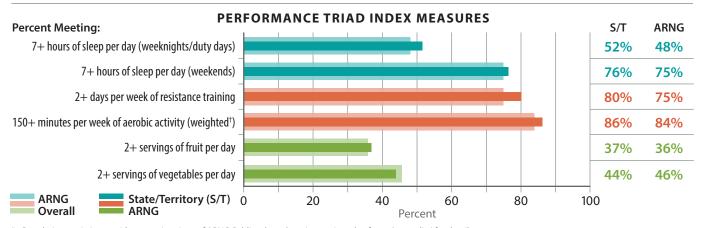


A DNIC

AV/EDAGE

MEACURE	\/A E	AVERAGE	ARNG
MEASURE	VALUE	ARNG VALUE	VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	89	86	81–94
Dental readiness classification (% ready)	94	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.3	6.0	2.6–14
Depression (% with self-reported symptoms)	3.7	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.7	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	3.4	6.4	2.1–11
Health Factors			
Obesity (%)	21	25	15–34
Flagged for weight (%)	4.6	4.9	1.9-8.1
APFT failure (%)	7.7	12	4.4–17
Smoking tobacco use (%)	9.9	14	2.0-21
Smokeless tobacco use (%)	8.1	12	0.0-22
Hazardous alcohol use (%)	5.1	6.4	2.6–19
Hypertension (%)	4.3	6.5	3.4–11

ARNG Health Index Score*** **80–89th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

2018 HEALTH OF THE ARNG FORCE

[†] Please see page 48 for a description of the aerobic activity target.

New Hampshire

Army National Guard

Profile (2017)*

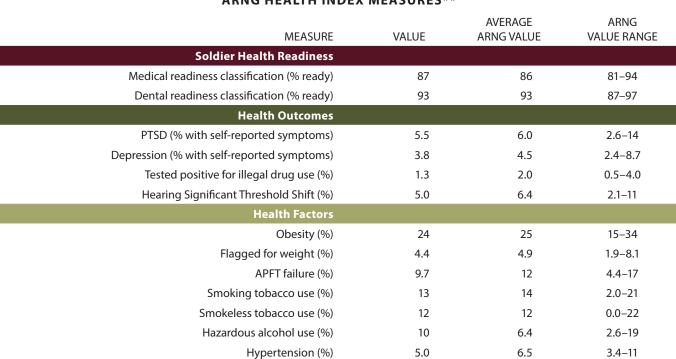
End-Strength: 1,800 (12% Female)

AGR/Mil Tech: 20%

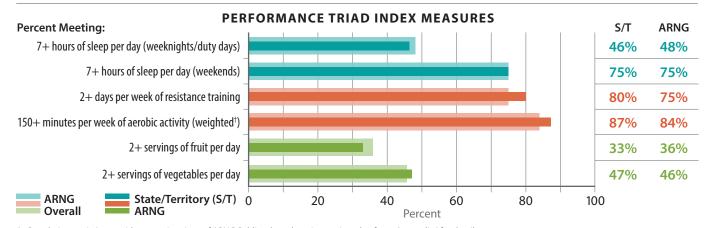
State Population: 1,300,000 (1.3 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 22 / 54





ARNG Health Index Score*** **50–59th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

New Jersey Army National Guard

Profile (2017)*

End-Strength: 5,600 (18% Female)

AGR/Mil Tech: 16%

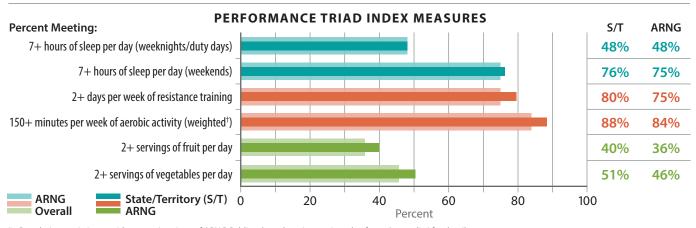
State Population: 8,900,000 (0.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 10 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness	VALUE	Alliva Wilde	WILDE HANGE
Medical readiness classification (% ready)	85	86	81–94
Dental readiness classification (% ready)	95	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	3.8	6.0	2.6–14
Depression (% with self-reported symptoms)	2.6	4.5	2.4-8.7
Tested positive for illegal drug use (%)	2.1	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	5.2	6.4	2.1–11
Health Factors			
Obesity (%)	28	25	15–34
Flagged for weight (%)	4.4	4.9	1.9-8.1
APFT failure (%)	11	12	4.4–17
Smoking tobacco use (%)	11	14	2.0–21
Smokeless tobacco use (%)	5.0	12	0.0–22
Hazardous alcohol use (%)	4.0	6.4	2.6–19
Hypertension (%)	5.3	6.5	3.4–11

ARNG Health Index Score*** **80–89th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

New Mexico

Army National Guard

Profile (2017)*

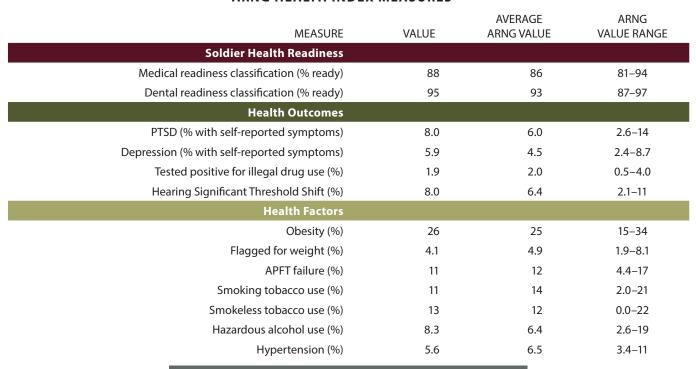
End-Strength: 2,500 (18% Female)

AGR/Mil Tech: 20%

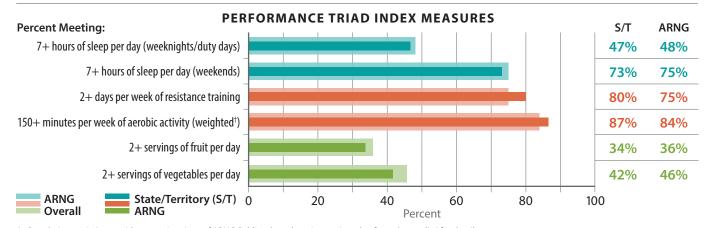
State Population: 2,000,000 (1.2 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 39 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** 20–29th percentile



 $^{* \}quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$

New York

Army National Guard

Profile (2017)*

End-Strength: 9,600 (16% Female)

AGR/Mil Tech: 14%

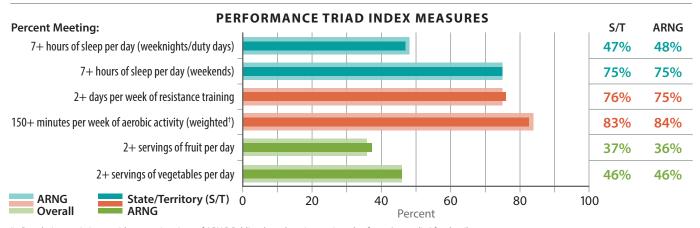
State Population: 19,000,000 (0.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 12 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	87	86	81–94
Dental readiness classification (% ready)	95	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	4.4	6.0	2.6–14
Depression (% with self-reported symptoms)	3.2	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.7	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	6.1	6.4	2.1–11
Health Factors			
Obesity (%)	27	25	15–34
Flagged for weight (%)	5.4	4.9	1.9-8.1
APFT failure (%)	12	12	4.4–17
Smoking tobacco use (%)	13	14	2.0-21
Smokeless tobacco use (%)	7.3	12	0.0-22
Hazardous alcohol use (%)	5.9	6.4	2.6–19
Hypertension (%)	4.6	6.5	3.4–11

ARNG Health Index Score*** **70–79th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{**} See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

North Carolina

Army National Guard

Profile (2017)*

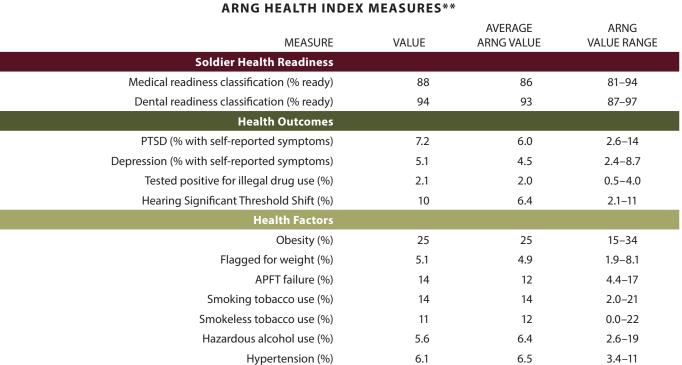
End-Strength: 10,000 (17% Female)

AGR/Mil Tech: 16%

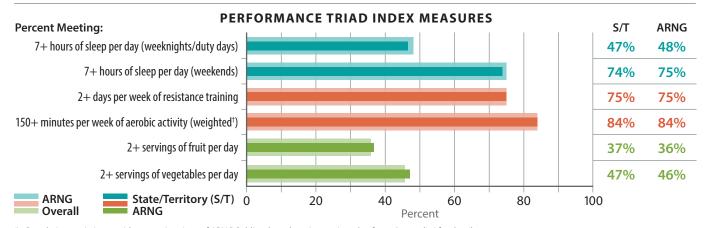
State Population: 10,000,000 (1.0 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 44 / 54





ARNG Health Index Score*** 10–19th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

North Dakota

Army National Guard

Profile (2017)*

End-Strength: 2,700 (17% Female)

AGR/Mil Tech: 21%

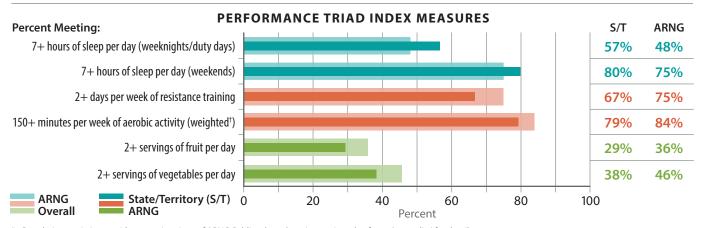
State Population: 750,000 (3.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 17 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	VALUE	ARING VALUE	VALUE RAINGE
Soldier Health Readiness			
Medical readiness classification (% ready)	91	86	81–94
Dental readiness classification (% ready)	96	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.3	6.0	2.6–14
Depression (% with self-reported symptoms)	3.6	4.5	2.4-8.7
Tested positive for illegal drug use (%)	0.7	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	2.1	6.4	2.1–11
Health Factors			
Obesity (%)	25	25	15-34
Flagged for weight (%)	7.9	4.9	1.9-8.1
APFT failure (%)	13	12	4.4–17
Smoking tobacco use (%)	16	14	2.0-21
Smokeless tobacco use (%)	18	12	0.0-22
Hazardous alcohol use (%)	13	6.4	2.6–19
Hypertension (%)	6.8	6.5	3.4–11

ARNG Health Index Score*** 60-69th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations)



AV/EDACE

[†] Please see page 48 for a description of the aerobic activity target.

Ohio

Army National Guard

Profile (2017) *

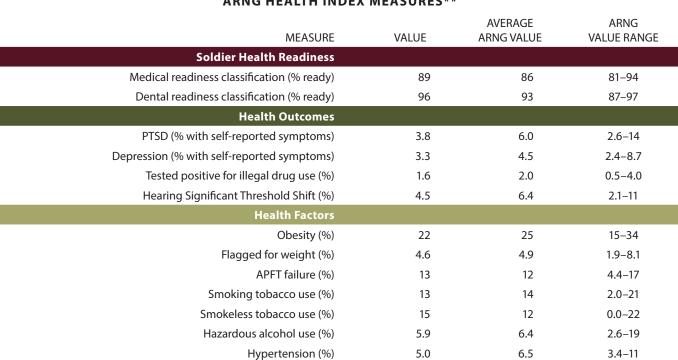
End-Strength: 11,000 (17% Female)

AGR/Mil Tech: 13%

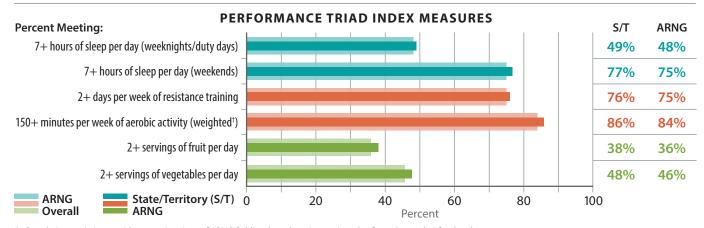
State Population: 11,000,000 (1.0 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 8 / 54





ARNG Health Index Score*** **80–89th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

▶Oklahoma

Army National Guard

Profile (2017)*

End-Strength: 6,200 (16% Female)

AGR/Mil Tech: 14%

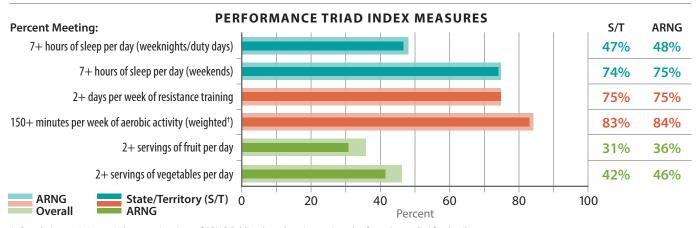
State Population: 3,900,000 (1.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 41 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
Ī	Medical readiness classification (% ready)	89	86	81–94
	Dental readiness classification (% ready)	94	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	7.6	6.0	2.6–14
	Depression (% with self-reported symptoms)	4.8	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	2.7	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	5.1	6.4	2.1–11
	Health Factors			
	Obesity (%)	26	25	15–34
	Flagged for weight (%)	8.1	4.9	1.9-8.1
	APFT failure (%)	15	12	4.4–17
	Smoking tobacco use (%)	15	14	2.0–21
	Smokeless tobacco use (%)	17	12	0.0–22
	Hazardous alcohol use (%)	5.9	6.4	2.6–19
	Hypertension (%)	8.0	6.5	3.4–11

ARNG Health Index Score*** 20–29th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).



[†] Please see page 48 for a description of the aerobic activity target.

► Oregon Army National Guard

Profile (2017)*

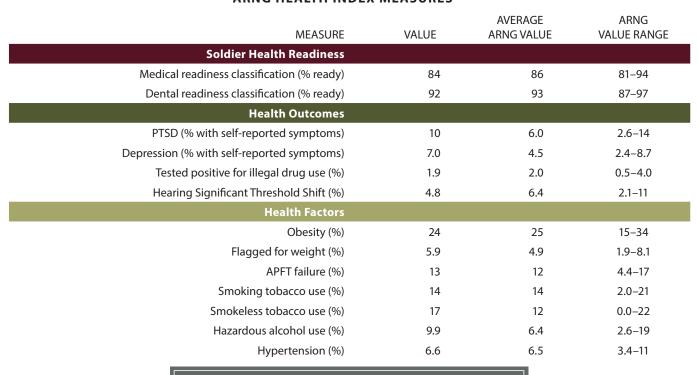
End-Strength: 5,100 (14% Female)

AGR/Mil Tech: 19%

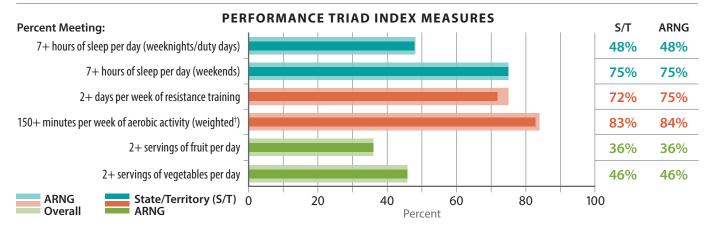
State Population: 4,100,000 (1.2 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 50 / 54









 $^{* \}quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$

Pennsylvania

Army National Guard

Profile (2017)*

End-Strength: 14,000 (16% Female)

AGR/Mil Tech: 17%

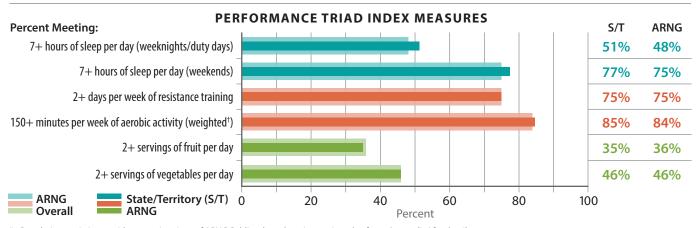
State Population: 13,000,000 (1.1 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 40 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
Ī	Medical readiness classification (% ready)	84	86	81–94
_	Dental readiness classification (% ready)	92	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	4.2	6.0	2.6–14
	Depression (% with self-reported symptoms)	3.7	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	2.4	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	6.6	6.4	2.1–11
	Health Factors			
	Obesity (%)	24	25	15–34
	Flagged for weight (%)	5.5	4.9	1.9-8.1
	APFT failure (%)	16	12	4.4–17
	Smoking tobacco use (%)	15	14	2.0–21
	Smokeless tobacco use (%)	13	12	0.0-22
	Hazardous alcohol use (%)	4.7	6.4	2.6–19
	Hypertension (%)	5.1	6.5	3.4–11

ARNG Health Index Score*** 20–29th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{**} See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

► Puerto Rico

Army National Guard

Profile (2017)*

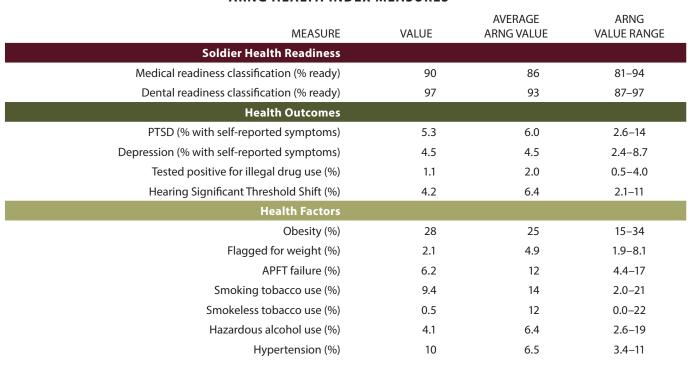
End-Strength: 6,000 (12% Female)

AGR/Mil Tech: 16%

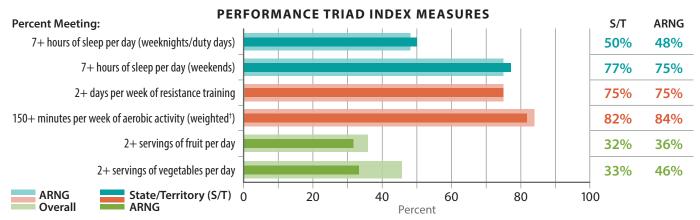
State Population: 3,300,000 (1.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 2/54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** >90th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Rhode Island

Army National Guard

Profile (2017)*

End-Strength: 1,700 (15% Female)

AGR/Mil Tech: 21%

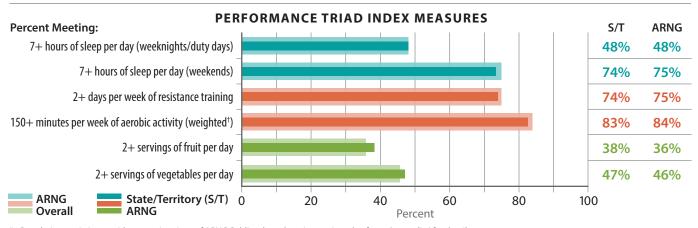
State Population: 1,100,000 (1.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 18 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness	VALUE	ANNG VALOL	. VALOE NANGE
Medical readiness classification (% ready)	84	86	81–94
Dental readiness classification (% ready)	92	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.4	6.0	2.6–14
Depression (% with self-reported symptoms)	3.5	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.9	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	4.0	6.4	2.1–11
Health Factors			
Obesity (%)	21	25	15–34
Flagged for weight (%)	4.5	4.9	1.9-8.1
APFT failure (%)	10	12	4.4–17
Smoking tobacco use (%)	12	14	2.0-21
Smokeless tobacco use (%)	8.0	12	0.0-22
Hazardous alcohol use (%)	8.5	6.4	2.6–19
Hypertension (%)	6.3	6.5	3.4–11

ARNG Health Index Score*** **60–69th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.



South Carolina

Army National Guard

Profile (2017)*

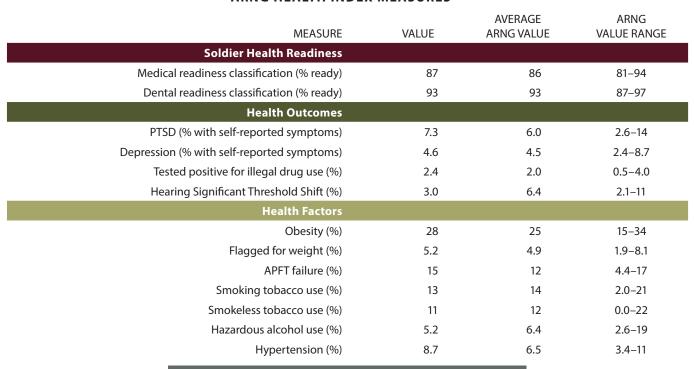
End-Strength: 8,300 (19% Female)

AGR/Mil Tech: 18%

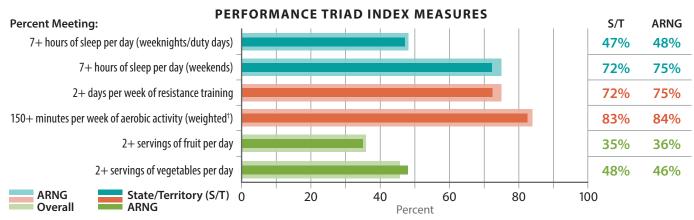
State Population: 4,900,000 (1.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 36 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** **30–39th percentile**



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

South Dakota

Army National Guard

Profile (2017)*

End-Strength: 3,000 (16% Female)

AGR/Mil Tech: 18%

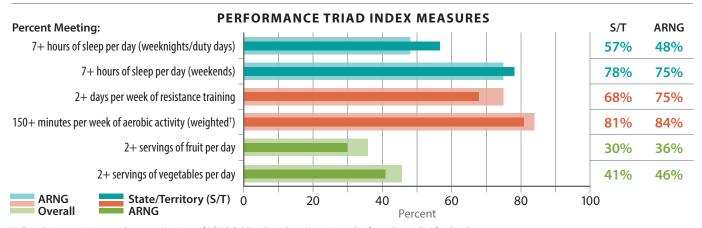
State Population: 860,000 (3.5 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 4 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
Ī	Medical readiness classification (% ready)	89	86	81–94
_	Dental readiness classification (% ready)	95	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	3.5	6.0	2.6–14
	Depression (% with self-reported symptoms)	2.9	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	0.8	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	5.9	6.4	2.1–11
	Health Factors			
	Obesity (%)	21	25	15–34
	Flagged for weight (%)	3.4	4.9	1.9-8.1
	APFT failure (%)	7.6	12	4.4–17
	Smoking tobacco use (%)	14	14	2.0–21
	Smokeless tobacco use (%)	19	12	0.0–22
	Hazardous alcohol use (%)	6.1	6.4	2.6–19
	Hypertension (%)	7.3	6.5	3.4–11

ARNG Health Index Score*** >90th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.



Tennessee

Army National Guard

Profile (2017) *

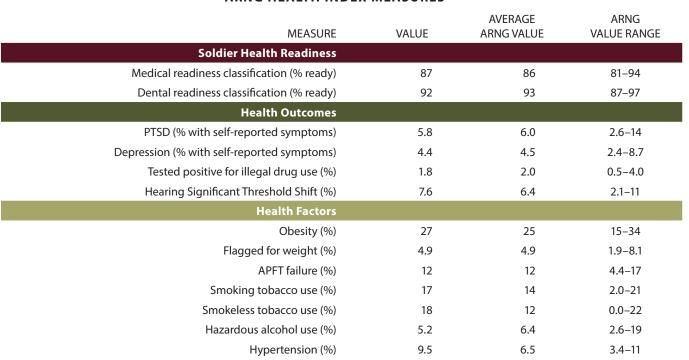
End-Strength: 9,300 (14% Female)

AGR/Mil Tech: 16%

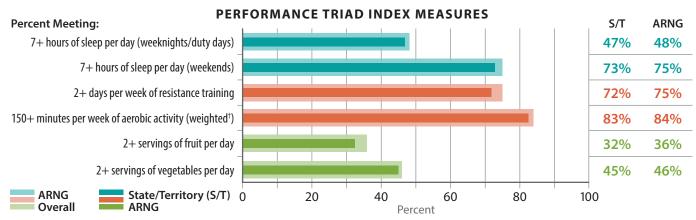
State Population: 6,700,000 (1.4 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 38 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** 20–29th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

► Texas

Army National Guard

Profile (2017)*

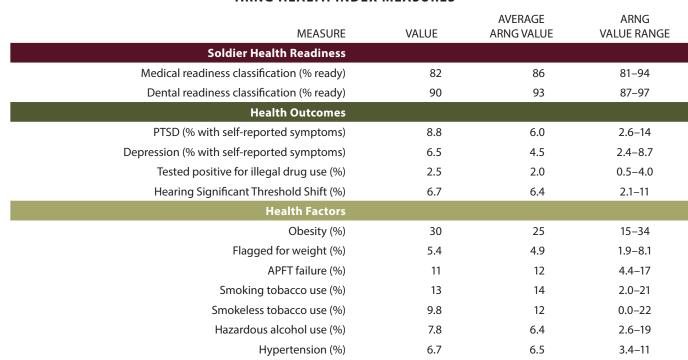
End-Strength: 17,900 (17% Female)

AGR/Mil Tech: 12%

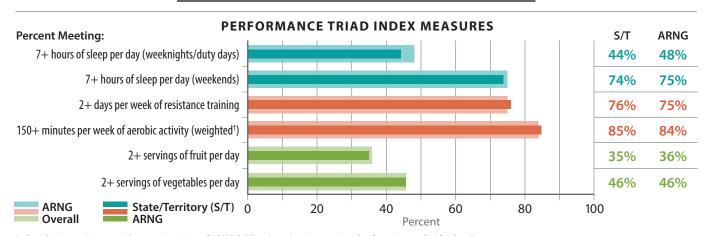
State Population: 28,000,000 (0.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 52 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** <10th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).



[†] Please see page 48 for a description of the aerobic activity target.

U.S. Virgin Islands

Army National Guard

Profile (2017)*

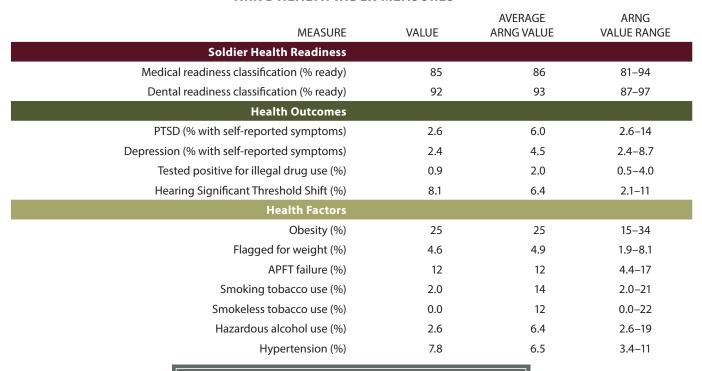
End-Strength: 690 (40% Female)

AGR/Mil Tech: 30%

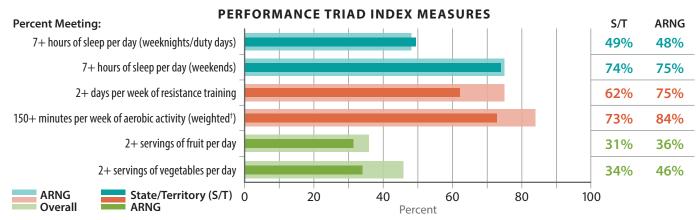
State Population: 100,000 (6.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 3 / 54

ARNG HEALTH INDEX MEASURES**



ARNG Health Index Score*** >90th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Utah

Army National Guard

Profile (2017)*

End-Strength: 5,000 (8.9% Female)

AGR/Mil Tech: 21%

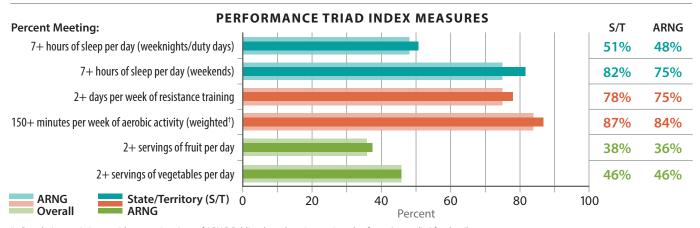
State Population: 3,100,000 (1.6 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 1 / 54

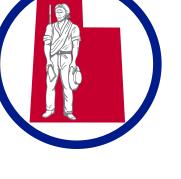
ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
Ī	Medical readiness classification (% ready)	91	86	81–94
_	Dental readiness classification (% ready)	97	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	4.4	6.0	2.6–14
	Depression (% with self-reported symptoms)	3.2	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	0.5	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	2.5	6.4	2.1–11
	Health Factors			
	Obesity (%)	18	25	15–34
	Flagged for weight (%)	2.2	4.9	1.9-8.1
	APFT failure (%)	4.4	12	4.4–17
	Smoking tobacco use (%)	6.3	14	2.0-21
	Smokeless tobacco use (%)	7.4	12	0.0–22
	Hazardous alcohol use (%)	2.8	6.4	2.6–19
	Hypertension (%)	5.9	6.5	3.4–11

ARNG Health Index Score*** >90th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations)



STATE PROFILE SUMMARIES 2018 HEALTH OF THE ARNG FORCE

[†] Please see page 48 for a description of the aerobic activity target.

Vermont

Army National Guard

Profile (2017)*

End-Strength: 1,700 (15% Female)

AGR/Mil Tech: 27%

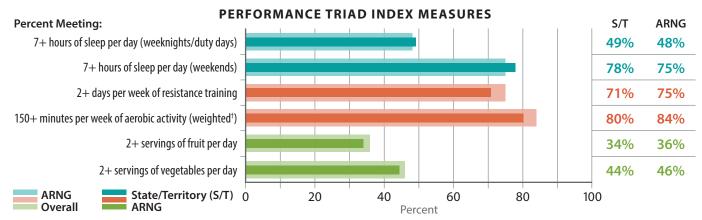
State Population: 620,000 (2.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 46 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	85	86	81–94
Dental readiness classification (% ready)	94	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	6.6	6.0	2.6-14
Depression (% with self-reported symptoms)	4.1	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.1	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	11	6.4	2.1–11
Health Factors			
Obesity (%)	30	25	15–34
Flagged for weight (%)	7.3	4.9	1.9-8.1
APFT failure (%)	10	12	4.4–17
Smoking tobacco use (%)	15	14	2.0-21
Smokeless tobacco use (%)	13	12	0.0-22
Hazardous alcohol use (%)	9.8	6.4	2.6–19
Hypertension (%)	7.1	6.5	3.4–11

ARNG Health Index Score*** 10–19th percentile



- * Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

Virginia

Army National Guard

Profile (2017)*

End-Strength: 8,500 (18% Female)

AGR/Mil Tech: 23%

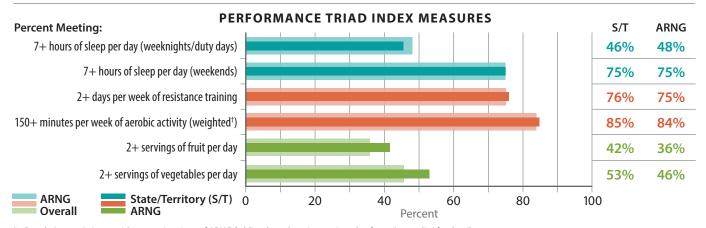
State Population: 8,200,000 (1.0 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 31 / 54

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	86	86	81–94
Dental readiness classification (% ready)	92	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	5.7	6.0	2.6–14
Depression (% with self-reported symptoms)	4.8	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.7	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	6.6	6.4	2.1–11
Health Factors			
Obesity (%)	25	25	15–34
Flagged for weight (%)	2.9	4.9	1.9-8.1
APFT failure (%)	9.2	12	4.4–17
Smoking tobacco use (%)	12	14	2.0-21
Smokeless tobacco use (%)	11	12	0.0-22
Hazardous alcohol use (%)	7.5	6.4	2.6–19
Hypertension (%)	8.7	6.5	3.4–11

ARNG Health Index Score*** 40–49th percentile



- ${}^{*} \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.}$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.



Washington

Army National Guard

Profile (2017)*

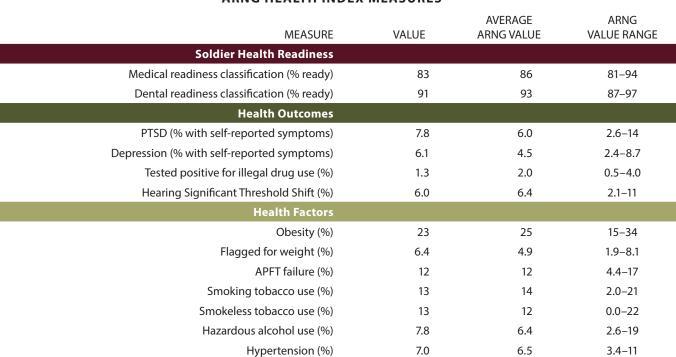
End-Strength: 5,900 (14% Female)

AGR/Mil Tech: 16%

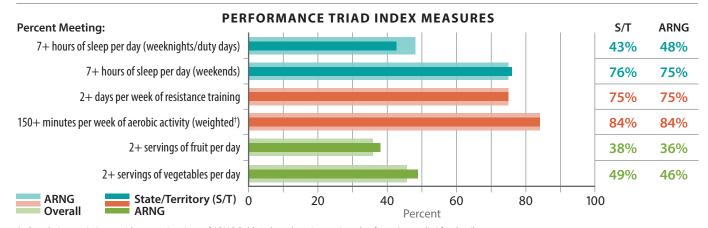
State Population: 7,300,000 (0.8 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 47 / 54





ARNG Health Index Score*** 10–19th percentile



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.
- ***The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).
- † Please see page 48 for a description of the aerobic activity target.

West Virginia

Army National Guard

Profile (2017)*

End-Strength: 3,000 (12% Female)

AGR/Mil Tech: 24%

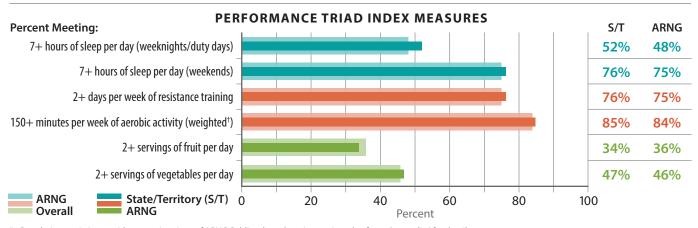
State Population: 1,800,000 (1.7 ARNG Soldiers per 1,000 population)

ARNG Health Index Ranking: 21 / 54

ARNG HEALTH INDEX MEASURES**

	MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
	Soldier Health Readiness			
	Medical readiness classification (% ready)	91	86	81–94
	Dental readiness classification (% ready)	97	93	87–97
	Health Outcomes			
	PTSD (% with self-reported symptoms)	4.9	6.0	2.6–14
	Depression (% with self-reported symptoms)	4.1	4.5	2.4-8.7
	Tested positive for illegal drug use (%)	1.1	2.0	0.5-4.0
	Hearing Significant Threshold Shift (%)	6.4	6.4	2.1–11
	Health Factors			
	Obesity (%)	23	25	15–34
	Flagged for weight (%)	5.2	4.9	1.9-8.1
	APFT failure (%)	17	12	4.4–17
	Smoking tobacco use (%)	14	14	2.0–21
	Smokeless tobacco use (%)	21	12	0.0-22
	Hazardous alcohol use (%)	6.6	6.4	2.6–19
	Hypertension (%)	9.1	6.5	3.4–11

ARNG Health Index Score*** **60–69th percentile**



- $* \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$
- ** See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

Wisconsin

Army National Guard

Profile (2017)*

End-Strength: 7,000 (18% Female)

AGR/Mil Tech: 15%

State Population: 5,800,000 (1.2 ARNG Soldiers per 1,000 population)

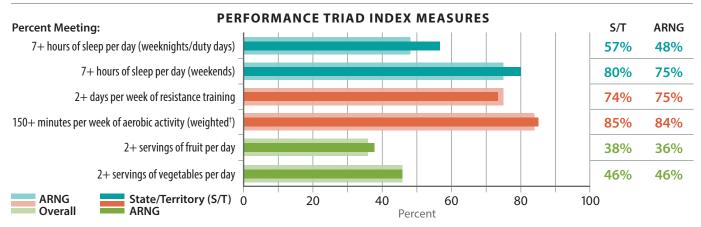
ARNG Health Index Ranking: 5 / 54





AV/EDACE

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness			
Medical readiness classification (% ready)	90	86	81–94
Dental readiness classification (% ready)	96	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	3.8	6.0	2.6-14
Depression (% with self-reported symptoms)	3.0	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.6	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	9.4	6.4	2.1–11
Health Factors			
Obesity (%)	15	25	15–34
Flagged for weight (%)	4.8	4.9	1.9-8.1
APFT failure (%)	12	12	4.4–17
Smoking tobacco use (%)	13	14	2.0-21
Smokeless tobacco use (%)	13	12	0.0-22
Hazardous alcohol use (%)	3.7	6.4	2.6–19
Hypertension (%)	3.4	6.5	3.4–11



ARNG Health Index Score*** >90th percentile

WyomingArmy National Guard

Profile (2017)*

End-Strength: 1,300 (13% Female)

AGR/Mil Tech: 26%

State Population: 570,000 (2.2 ARNG Soldiers per 1,000 population)

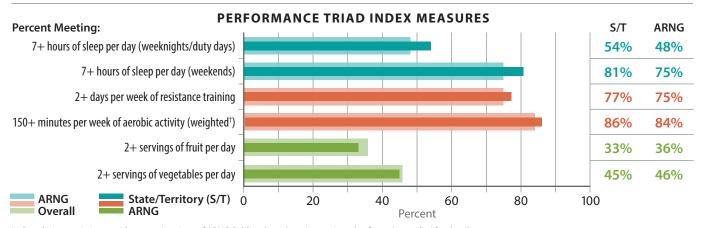
ARNG Health Index Ranking: 15 / 54

AVEDACE

ARNG HEALTH INDEX MEASURES**

MEASURE	VALUE	AVERAGE ARNG VALUE	ARNG VALUE RANGE
Soldier Health Readiness	WILDE	7 WINTE WILDE	WILDE IN IT GE
Medical readiness classification (% ready)	89	86	81–94
Dental readiness classification (% ready)	96	93	87–97
Health Outcomes			
PTSD (% with self-reported symptoms)	7.9	6.0	2.6–14
Depression (% with self-reported symptoms)	5.2	4.5	2.4-8.7
Tested positive for illegal drug use (%)	1.2	2.0	0.5-4.0
Hearing Significant Threshold Shift (%)	3.5	6.4	2.1–11
Health Factors			
Obesity (%)	23	25	15-34
Flagged for weight (%)	4.3	4.9	1.9-8.1
APFT failure (%)	9.8	12	4.4–17
Smoking tobacco use (%)	14	14	2.0-21
Smokeless tobacco use (%)	22	12	0.0-22
Hazardous alcohol use (%)	7.8	6.4	2.6–19
Hypertension (%)	5.8	6.5	3.4–11

ARNG Health Index Score*** **70–79th percentile**



- ${}^{*} \quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.}$
- ** See Appendix I for details regarding measure computations.

 $^{* \}quad \text{Population statistics provide approximations of ARNG Soldiers based on time assigned; refer to Appendix I for details.} \\$

^{**} See Appendix I for details regarding measure computations.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

^{***}The Health Index Score is a composite of all listed measures in relation to the ARNG averages; percentile ranges represent where a state ranks (higher percentiles reflect better ranking installations).

[†] Please see page 48 for a description of the aerobic activity target.

Appendices

APPENDICES

- Methods
- Acknowledgments

METHODS

National Guard Title 5 Employees comprise several categories of employees that were required to convert under National Defense Authorization Act of 2018. The first category, formerly known as Non-Dual Status employees, were employed under the authority of Title 32 but did not have a military membership requirement; they were civilian competitive employees. They have been converted to Title 5 National Guard Employees and remain in both the competitive service and as civilians. The second category of employees comprises 12.6% of the Title 32 Dual Status employees. These employees were converted to Title 5 National Guard Employees, i.e., civilian employees who no longer require military membership. These employees remain in the excepted service; however, they are now civilian full-time employees who "may" still be members of the National Guard.

National Guard dual-status technicians (Mil Techs) are civilians who work for the National Guard as full-time state employees, providing continuity and expertise in specialized military occupations as full-time members of the ARNG, thus their dual status. Mil Techs are in an ARNG Soldier duty status only 39 days per year (unless otherwise mobilized for a State/Federal mission). As full-time employees of their respective states, ARNG Mil Techs have access to state-sponsored health insurance plans.

Traditional Soldiers refers to the vast majority of National Guardsmen who drill 2 days a month (typically over a weekend) and complete 2 weeks of AT per year. Traditional Soldiers are obligated to complete 39 total training days per year (i.e., 2 drill periods/month x 12 months +15 days AT). Traditional Soldiers may be in uniform and pay status for more than 39 days throughout the year for professional school attendance, mandatory/elective training, Military Occupational Specialty (MOS) sustainment training, or mobilization (i.e., called up for State (Title 32) or Federal (Title 10) missions).

States will be used throughout this publication when referring to the 50 U.S. States, 3 Territories, and the District of Columbia.

Age for Traditional, AGR, and Mil Tech Soldiers was obtained from a personnel roster supplied by the ARNG. Social Security Numbers (SSN) were then merged with PHA data. Only those Soldiers with matching SSNs from both the personnel roster and PHA were considered. AGR and Mil Tech Soldiers were combined into a single group as they are deemed similar in terms of health risks. Distributions and means were reported.

Medical Readiness was reported as an annual average from monthly counts for each of the States and Territories. Readiness data were furnished by the ARNG, which reported readiness by State, Territory, and Area for MRC3, MRC4, DRC3, and DRC4. The calculation for "percent not medically ready within 72 hours" was the sum of the annual averages of MRC3 and MRC4. No data were reported for permanent profiles.

Health Outcomes were reported through two subsets of the PHA: the PHQ-8 and PCL-C. The PHQ-8 assigned Soldiers a depression score of no depression (<5), sub-threshold symptoms (5-9), mild depression (0-14), moderate depression (15-18), or severe depression (19-24). The PCL-C assigned Soldiers a PTSD score of no PTSD (<30), mild PTSD (30-39), moderate PTSD (40-49), or severe PTSD (≥50). Alcohol use was evaluated by the three-item AUDIT-C in the PHA. The AUDIT-C is scored on a scale of 1-12; a higher score is indicative of greater risk for alcohol use disorders.

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Appendix I Methods

Between the publication of the 2017 Health of the ARNG Force report and the 2018 Health of the ARNG Force report, the DOD adopted a higher threshold for hazardous drinking. The 2017 Health of the ARNG Force applied the lower thresholds (≥ 4 in men and ≥ 3 in women). In the current report, an AUDIT-C score of ≥ 5 in men and ≥ 4 in women is considered optimal for identifying hazardous drinking or alcohol use disorders in compliance with DOD recommendations.

Musculoskeletal duty-related injuries (MDRI) for FY17 were aggregated and collapsed into broad categories (sprains and strains, fractures, etc.) and reported by sex.

Health Factors by State were reported from the PHA self-reported questionnaire. One survey response per individual (the most recent) was retained for analysis. Soldier BMI was calculated from PULHES height and weight data in the PHA using weight in kilograms/height in meters. Overweight was defined as a BMI ≥25 and <30; obesity was defined as a BMI ≥30. Soldiers lacking a height and/or weight measurement were not included in the analysis. Calculated BMIs of <12 or >45 were deemed out of range and were not included in the analysis. Women who indicated on the PHA that they were pregnant were not included in the BMI analysis. Tobacco use (smoking: yes or no; smokeless: yes or no) was determined from PHA responses. APFT scores and the counts of Soldiers flagged for the ABCP were provided from the ARNG G1LifeCycle database for each State by month and averaged over FY17. Hypertension (yes or no) was determined from the PHA Soldier and healthcare provider responses.

Table. BMI Thresholds and Percent Body Fat Standards Currently Used by the U.S. Army.

Age category (y)	Body mass index (kg • m ⁻²)*	Relative body fat (%)
Men		
<21	25.9	20
21–27	26.5	22
28-39	27.2	24
>40**	27.5	26
Women		
<21	25.0	30
21–27	25.3	32
28-39	25.6	34
>40**	26.0	36

- * The AR uses tabled values rounded from these BMI thresholds (AR 600-9).
- ** The upper limits of BMI permitted in DODI 1308.3, DOD Physical Fitness and Body Fat Programs Procedures, November 5, 2002 are 25–27.5 kg·m⁻² for both sexes. Permissible body fat standards are 26–36% for women and 18–26% for men. Other military services use different age categories and limits within the permissible ranges.

Source: U.S. Army Public Health Center, Injury Prevention Division. Compiled based on AR 600-9 and DoDI 1308.3.

Performance Triad Indicators

P3 measures (sleep, activity, and nutrition) were obtained in aggregate from the ARD-G1 in coordination with the Army Analytics Group. Estimates were derived from relevant survey items collected within the Physical Domain of the GAT. Soldiers are required to complete the GAT annually per AR 350–53.¹ All GAT data were de-identified prior to analysis; these procedures follow policies to maintain the confidentiality and privacy of all individual-level responses on the assessment. Data were reported only when at least 40 responses were available as an aggregated summary statistic at the designated level of breakdown (e.g., installation, sex, and age group). In CY17, 161,424 ARNG Soldiers completed the GAT, representing an approximate response rate of 47%.

The sleep, activity, and nutrition data presented in this report represent the percentage of Soldiers achieving recommended health behavior targets. These targets are based on vetted national recommendations.

Sleep targets were based on guidelines from the CDC and the National Sleep Foundation. Targets include the percentage of Soldiers reporting an average of 7 or more hours of sleep per night for 1) weeknights and 2) weekends.² Thus, the sleep metrics were based on GAT survey questions assessing self-reported average hours of sleep per 24-hour period during weeknights/duty nights and the self-reported average hours of sleep per 24-hour period during weekends/days off.

Activity targets were similarly based on CDC recommendations. The first activity target included in this report is the percentage of Soldiers meeting resistance training of 2 or more days per week. Data for this metric are derived from a GAT survey question asking Soldiers to report the average number of days per week on which they participated in resistance training over the last 30 days. The second activity target relates to aerobic exercise; the target is met by engaging in 75 minutes of vigorous aerobic activity per week, or 150 minutes of moderate activity per week, or an equivalent combination³ of moderate and vigorous activity per week. The data for this metric are derived from a series of GAT questions asking about the average number of days per week in which the Soldier engaged in 1) vigorous activity and 2) moderate activity in the last 30 days, and the average number of minutes per day during which they engaged in these activities.

Nutrition targets were based on the U.S. Department of Agriculture MyPlate recommendations. Targets for fruit and vegetable consumption were included here as the percentage of Soldiers eating two or more servings⁴ of fruits and vegetables per day. The data for these metrics are based on GAT survey questions asking Soldiers to report the average servings of fruits and vegetables they consume per day, respectively, on average over the last 30 days.

Notes:

- 1. Department of the Army. 2014. Regulation 350-53, Comprehensive Soldier and Family Fitness. http://armypubs.army.mil.
- 2. Weeknights and weekends are reported separately because previous research indicates significant differences in behavior between weeknights and weekends.
- 3. The equivalent combination is based on a formula in which vigorous activity is more heavily weighted than moderate activity. Meeting the target is calculated as (2 * average minutes per week of vigorous activity) + average minutes per week of moderate activity ≥ 150.
- 4. MyPlate recommendations are based on cups of fruits and vegetables per day whereas the GAT items are based on servings per week or day (e.g., a serving is 1 cup of fruit or raw vegetables or ½ cup of fruit juice or cooked vegetables).

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ARNG Health Index

Health indices are widely used to gauge the overall health of populations. They offer an evidence-based tool for comparing a broad range of metrics across communities and can help inform community health needs assessments. Indices are also useful for ranking, which has proven effective in stimulating community interest and driving health improvement.

The 12 core measures included in this report were prioritized as leading health indicators (LHI) for the ARNG Soldier population based on the prevalence of the condition or factor, the potential health or readiness impact, the preventability of the condition or factor, the quality of the data, supporting evidence, and the importance to Army leadership.

In generating an AHI, the 12 selected indicators were standardized to the ARNG average using Z-scores. When possible, indicators were adjusted by age and sex prior to the standardization to allow more valid comparisons. The indicators were weighted and then collated into an overall AHI. The weights were as follows: Medical Readiness (10%), Dental Readiness (10%), Hearing Readiness (10%), Obesity (10%), APFT Failures (10%), Hypertension (5%), Illicit Substance Positive (5%), Smokeless Tobacco Use (5%), Smoking tobacco use (5%), Hazardous Alcohol Use (10%), and indicators of PTSD (10%) and Depression (10%). The AHI represents pooled standard deviations from the ARNG reference value.

While health indices provide a comprehensive measure of health which may help identify populations that could potentially benefit from enhanced public health prevention measures, aggregate indices may hide some of the driving factors. Healthcare decision-makers must further review individual measures that comprise the index in order to identify and effectively target key outcomes or behaviors that are the most significant health and readiness detractors for each State/Territory.

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HEALTH OF THE ARNG FORCE

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