

Executive Summary

2019
HEALTH
OF THE
FORCE

Create a **healthier force** for tomorrow.



— U.S. Army Public Health Center —

*Approved for public release,
distribution unlimited.*

Welcome to the 2019 *Health of the Force* Report

OVERVIEW

The health of the individual Soldier is the foundation of the Army's ability to deploy, fight, and win against any adversary. The 2019 *Health of the Force* report is the Army's 5th annual population health report documenting conditions that influence the health and medical readiness of the U.S. Army Active Component (AC) Soldier population. Leaders can use *Health of the Force* to optimize health promotion measures and effect culture changes that align with Army modernization efforts to achieve Force dominance. *Health of the Force* presents Army-wide and installation-level demographics and data for more than 20 health, wellness, and environmental indicators at 40 installations worldwide. Installations included in *Health of the Force* are those where the AC population exceeds 1,000 Soldiers. Data presented in this report reflect status for the prior year (i.e., the 2019 report reflects calendar year 2018 data).

READY AND RESILIENT

During 2018, 7%–12% of AC Soldiers were classified as non-deployable, and 70% of these classifications were due to medical non-readiness. As in prior years, musculoskeletal injuries and behavioral health issues are the conditions contributing to the majority of temporary and permanent medical non-readiness.

The range of health metrics detailed in *Health of the Force* represents an evidence-based resource that can help Army leaders understand the causes of and contributors to medical non-readiness, and direct informed policy and programmatic efforts to optimize Soldier health.

NEW PARTNERSHIPS, NEW INSIGHTS

For the first time, most of the medical and personnel data in the 2019 *Health of the Force* were provided through a new partnership with the Army Analytics Group (AAG). This partnership enabled access to line-level medical record data. The improved granularity of this dataset permitted detailed demographic analysis and customized summarizations of health metrics to meet the needs and priorities of Army stakeholders.

Recent increases in Army training-related heat illness and rising temperatures influenced by a changing climate point to a need for additional awareness and surveillance of the contributors to heat-related health effects. In 2019, the *Health of the Force* introduces a new environmental health indicator that quantifies the portion of the year likely to experience heat risk at garrison population centers, and compares it to historic trends for the region.

ENGAGE, EXPLORE, AND CONNECT WITH THE DATA

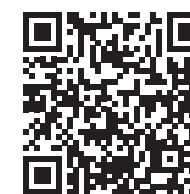
The 2019 print edition is enhanced by *Health of the Force* Online, an interactive online interface that allows readers to drill down into Army population health datasets. Users can create customized data visualizations to explore subpopulations or metrics of interest. Together, these *Health of the Force* products facilitate informed decisions that will improve the readiness, health, and well-being of Soldiers and the Total Army Family.

A suite of products to help YOU improve Force readiness!



Our Purpose

Empower Army senior leaders with knowledge and context to improve Army health and Soldier readiness.



Scan Here

2019 HEALTH OF THE FORCE Report Highlights

DEMOGRAPHICS:

Approximately 460,000 AC Soldiers
78% under 35 years old, 15% female

INJURY

In 2018, approximately
1,670
new injuries were diagnosed
per 1,000 person-years.



53% of Soldiers
had a new injury.



71% of all injuries
were cumulative
micro-traumatic
musculoskeletal
“overuse” injuries.

BEHAVIORAL HEALTH

16% of Soldiers had a
diagnosis of one
or more behavioral health
disorders.



The most common behavioral health diagnosis
was adjustment disorder. The prevalence
of behavioral health diagnoses was higher
among female Soldiers.

SUBSTANCE USE

Overall,
3.7% of Soldiers had a substance
use disorder diagnosis.

Rates were highest among male
Soldiers <25 years of age.



SLEEP DISORDERS

14% of Soldiers had a diagnosed
sleep disorder in 2018.

Sleep apnea and insomnia
diagnoses made up more than
50% of the diagnosed sleep
disorders.



OBESITY

17% of Soldiers were classified
as obese, compared to



of a similar population
of U.S. adults.

TOBACCO PRODUCT USE

26% of Soldiers reported
tobacco use
(not including electronic cigarettes).

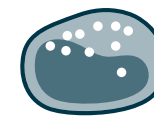


7.2% of Soldiers reported the use of
electronic cigarettes.



The majority of tobacco product users are
34 years of age or younger.

SEXUALLY TRANSMITTED INFECTIONS



Reported chlamydia infection rates
were **58%** higher than in 2014.

The rate of reported chlamydia infections
was three times higher in female Soldiers
compared to males; this may be partially
due to increased screening among pregnant
women and women under 25 years.

CHRONIC DISEASE

19% of Soldiers had a chronic disease,
a decrease since 2015.

In 2018, the most prevalent
chronic disease was arthritis,

(9.3%)

followed by
cardiovascular disease.
(6.0%)



VECTOR-BORNE DISEASE



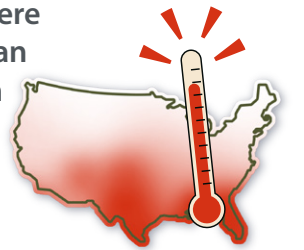
42% of Soldiers were at
installations with
high risk of disease transmission
from day-biting mosquitoes.

11% of Soldiers were at
installations with high risk of
Lyme disease transmission.



HEAT RISK

39% of Soldiers were
stationed at an
installation with more than
100 heat risk days, mostly
concentrated in the south
and southeast U.S.



PERFORMANCE TRIAD

39% of Soldiers attained 7 or more
hours of sleep on weeknights/
duty nights.

90% of Soldiers achieved
moderate and/or vigorous
aerobic activity targets.



Selected Medical Metrics

Presented values are adjusted for age and sex

	Injury (rate per 1,000)	Substance use disorder (%)	Sleep disorder (%)	Obesity (%)	STIs: Chlamydia infection (rate per 1,000)	Tobacco product use (%)	Chronic disease (%)
Fort Belvoir	1,693	3.4	18	20	21	24	25
Fort Benning	2,211	2.4	14	15	27	15	21
Fort Bliss	1,566	4.3	17	17	27	29	19
Fort Bragg	1,616	3.9	13	17	27	24	17
Fort Campbell	1,615	3.5	15	18	29	20	18
Fort Carson	1,390	3.7	14	15	30	22	19
Fort Drum	1,644	3.7	14	20	28	39	20
Fort Gordon	1,897	3.1	14	23	20	15	20
Fort Hood	1,603	5.0	19	19	28	29	21
Fort Huachuca	1,770	2.4	13	14	22	15	21
Fort Irwin	1,735	6.5	18	18	30	34	20
Fort Jackson	2,660	2.1	12	16	23	22	18
Fort Knox	1,819	2.8	17	18	25	14	24
Fort Leavenworth	2,120	3.7	14	20	24	28	24
Fort Lee	2,322	2.5	16	18	22	10	22
Fort Leonard Wood	2,213	2.6	14	16	27	11	20
Fort Meade	1,789	2.7	17	22	18	15	22
Fort Polk	1,590	4.6	14	18	31	25	25
Fort Riley	1,404	4.8	15	17	30	29	21
Fort Rucker	2,114	1.8	16	15	19	14	20
Fort Sill	2,156	3.7	19	20	30	17	21
Army	1,699	3.5	15	17	25	22	20

Footnotes: See page 12.

Selected Medical Metrics

Presented values are adjusted for age and sex

	Injury (rate per 1,000)	Substance use disorder (%)	Sleep disorder (%)	Obesity (%)	STIs: Chlamydia infection (rate per 1,000)	Tobacco product use (%)	Chronic disease (%)
Fort Stewart	1,520	4.2	16	18	29	20	23
Fort Wainwright	1,567	4.2	16	18	30	24	21
Hawaii	1,701	3.3	15	17	21	34	21
JB Elmendorf-Richardson	1,754	2.4	14	15	28	22	19
JB Langley-Eustis	2,200	3.0	16	21	24	16	22
JB Myer-Henderson Hall	1,403	4.5	12	14	23	18	18
JB San Antonio	1,824	2.7	17	15	15	12	23
Presidio of Monterey	1,765	2.9	12	14	19	Data Suppressed*	18
USAG West Point	1,383	2.0	9	18	15	Data Suppressed*	21
INSTALLATIONS OUTSIDE THE UNITED STATES							
Japan	1,189	2.5	8	22	23	Data Suppressed*	17
USAG Bavaria	1,428	4.5	13	16	30	26	18
USAG Daegu	1,389	2.8	12	15	23	47	19
USAG Humphreys	1,388	3.2	12	16	27	42	17
USAG Red Cloud	1,307	4.2	11	16	27	24	18
USAG Rheinland-Pfalz	1,473	4.7	19	19	25	28	21
USAG Stuttgart	1,393	4.1	13	15	23	19	20
USAG Vicenza	1,383	5.2	12	15	27	11	17
USAG Wiesbaden	1,463	3.2	16	20	25	23	21
USAG Yongsan	1,461	4.0	13	17	24	14	18
Army	1,699	3.5	15	17	22	22	20

Footnotes: See page 12.

Environmental Health Indicators

	Poor air quality (days per year)	Poor water quality (days per year)	Water fluoridation (mg/L)	Solid waste diversion rate (%)	Mosquito-borne disease risk	Lyme disease risk	Heat risk (days per year)
Fort Belvoir	1	0	0.70	51	Moderate	High	70
Fort Benning	0	0	0.61	24	High	Moderate	140
Fort Bliss	17	0	0.84	40	Moderate	No Data	88
Fort Bragg	0	0	0.54	33	High	Moderate	108
Fort Campbell	0	0	0.60	34	Moderate	Low	86
Fort Carson	8	0	0.41	45	Low	No Data	4
Fort Drum	2	0	0.70	59	Low	High	17
Fort Gordon	6	0	0.72	22	High	No Data	140
Fort Hood	5	0	0.21	53	High	No Data	127
Fort Huachuca	0	0	0.70	0	Moderate	Low	30
Fort Irwin	55	0	1.5	30	Moderate	No Data	95
Fort Jackson	1	0	0.63	29	High	Low	138
Fort Knox	0	0	0.65	43	Moderate	Low	36
Fort Leavenworth	0	0	0.57	26	Moderate	Low	75
Fort Lee	No Data	0	0.67	51	Moderate	Moderate	73
Fort Leonard Wood	No Data	0	0.78	51	Moderate	Moderate	72
Fort Meade	9	0	0.71	47	Moderate	High	50
Fort Polk	No Data	0	0.90	59	High	No Data	135
Fort Riley	No Data	75	0.56	44	Moderate	Low	92
Fort Rucker	No Data	0	0.65	63	High	No Data	138
Fort Sill	4	0	0.58	96	Moderate	Low	126

Footnotes: See page 12.

Environmental Health Indicators

	Poor air quality (days per year)	Poor water quality (days per year)	Water fluoridation (mg/L)	Solid waste diversion rate (%)	Mosquito-borne disease risk	Lyme disease risk	Heat risk (days per year)
Fort Stewart	No Data	0	0.98	59	High	Moderate	130
Fort Wainwright	30	0	0.30	4	Low	No Data	0
Hawaii	0	0	0.70	29	High	No Data	17
JB Elmendorf-Richardson	0	0	0.58	20	Low	No Data	0
JB Langley-Eustis	0	0	0.84	No Data	Moderate	Moderate	86
JB Myer-Henderson Hall	1	0	0.70	96	High	High	61
JB San Antonio	11	0	0.48	No Data	High	Moderate	137
Presidio of Monterey	7	0	0.22	39	Low	Moderate	0
USAG West Point	1	0	0.40	No Data	Moderate	No Data	36
INSTALLATIONS OUTSIDE THE UNITED STATES							
Japan	19	0	0.81	57	Moderate	No Data	56
USAG Bavaria	4	365	0.69	59	Moderate	High	5
USAG Daegu	100	0	No Data	68	Moderate	No Data	56
USAG Humphreys	76	3	0.15	68	Moderate	Moderate	58
USAG Red Cloud	130	0	No Data	100	Moderate	No Data	42
USAG Rheinland-Pfalz	13	0	No Data	70	Moderate	High	1
USAG Stuttgart	15	0	0.80	55	Moderate	High	3
USAG Vicenza	No Data	0	0.10	55	Moderate	Low	47
USAG Wiesbaden	18	344	0	52	Moderate	High	11
USAG Yongsan	78	0	0.97	No Data	Moderate	No Data	42

Footnotes: See page 12.

Performance Triad

	7+ hours of sleep [weeknights] (%)	7+ hours of sleep [weekends] (%)	2+ days per week of resistance training (%)	150+ minutes per week of aerobic activity (%)	2+ servings of fruits per day (%)	2+ servings of vegetables per day (%)
Fort Belvoir	42	75	77	86	38	49
Fort Benning	39	74	86	91	39	47
Fort Bliss	36	68	81	89	31	42
Fort Bragg	39	70	84	90	33	46
Fort Campbell	39	69	83	90	31	43
Fort Carson	40	70	83	90	32	43
Fort Drum	37	70	82	90	32	42
Fort Gordon	36	73	81	89	33	43
Fort Hood	34	67	81	89	31	41
Fort Huachuca	41	78	83	91	30	41
Fort Irwin	38	69	81	91	32	44
Fort Jackson	39	73	83	89	37	43
Fort Knox	48	86	86	92	40	53
Fort Leavenworth	41	73	80	92	39	49
Fort Lee	37	70	81	88	34	40
Fort Leonard Wood	39	74	84	90	34	41
Fort Meade	42	73	79	87	34	47
Fort Polk	36	68	82	89	31	41
Fort Riley	37	68	81	89	30	41
Fort Rucker	55	82	83	88	36	50
Fort Sill	40	79	84	91	33	41
Army	39	73	83	90	35	44

Footnotes: See page 12.

Performance Triad

	7+ hours of sleep [weeknights] (%)	7+ hours of sleep [weekends] (%)	2+ days per week of resistance training (%)	150+ minutes per week of aerobic activity (%)	2+ servings of fruits per day (%)	2+ servings of vegetables per day (%)
Fort Stewart	36	67	82	89	31	41
Fort Wainwright	37	69	82	90	31	43
Hawaii	39	69	81	89	33	45
JB Elmendorf-Richardson	38	70	84	91	34	45
JB Langley-Eustis	41	72	81	89	33	42
JB Myer-Henderson Hall	44	77	81	89	41	55
JB San Antonio	43	79	81	88	39	51
Presidio of Monterey	46	84	84	90	39	55
USAG West Point	49	82	80	88	40	56
INSTALLATIONS OUTSIDE THE UNITED STATES						
Japan	39	70	81	88	33	47
USAG Bavaria	40	70	84	90	33	43
USAG Daegu	33	70	80	89	30	40
USAG Humphreys	39	70	81	88	30	40
USAG Red Cloud	31	65	80	89	29	40
USAG Rheinland-Pfalz	37	69	79	88	34	44
USAG Stuttgart	39	70	81	88	34	48
USAG Vicenza	38	70	84	89	34	48
USAG Wiesbaden	39	70	79	87	32	45
USAG Yongsan	39	70	81	88	30	43
Army	39	73	83	90	35	44

Footnotes: See page 12.

Footnotes

1. Adjusted values are weighted averages of crude age- and sex-specific frequencies, where the weights are the proportions of Soldiers in the corresponding age and sex categories of the 2015 Army AC population. By using a common adjustment standard such as this, we are able to make valid comparisons across installations because it controls for age and sex differences in the population which might influence crude rates.

2. The Army values represent crude values for the entire Army.

3. Air quality status was imputed from the surrounding Air Quality Control Region.

* Medical metric values were not displayed if <20 cases were reported or when the reporting compliance was estimated to be <50%. However, every installation met the reporting compliance threshold for the reporting year.



2019 HEALTH OF THE FORCE REPORT



Visit us at <https://phc.amedd.army.mil/topics/campaigns/hof>