

NMCPHC Workplace Health Risk Assessment: Sexual Health Supplement, CY 2016

Executive Summary

The NMCPHC Health Risk Assessment (HRA) is a 22-question anonymous self-assessment of the most common health risk behaviors. It supports preventive health screening and counseling by healthcare providers when used during the annual Periodic Health Assessment (PHA), provides individual members with credible sources of health information on the Web, provides data to health educators to plan and implement workplace and community interventions, and provides commanding officers at all levels with summaries of the health risks among their workforce.

The tool is web-based, but there is also a stand-alone MS Access-based version that can be used on ships that have poor Internet connectivity. Completion of the assessment takes about three minutes and provides a personalized report to each individual. A total of 210,031 assessments of active duty and reserve members from the United States Navy (USN), USN Reserves (USNR), United States Marine Corps (USMC), USMC Reserves (USMCR), United States Coast Guard (USCG), and USCG Reserves (USCGR) were completed from 01 January 1 to 31 December 2016 and were analyzed.

This report utilizes both descriptive and analytic methods to report the results as well as by service component and specific demographics. The following demographic variables were examined: age, sex, race, rank, and service component. Analyses utilized one of two measures: 1) 'healthy' or 'unhealthy' risk ratings or 2) "days away from home station".



Methods

This analysis consisted of HRAs completed from 01 January to 31 December 2016 by 136,089 USN and USNR service members, 39,263 USMC and USMCR service members, and 34,679 USCG and USCGR service members who responded to the following sexual health questions on the HRA:

Question #13. In the past 12 months, how often did you or your partner(s) use a condom when you had sex (Read all choices below carefully before responding)?

- a. Does not apply to me because I am in a long-term relationship where we only have sex with each other – OR – does not apply to me for other reasons.
- b. Currently I am not sexually active
- c. Always
- d. Most of the time
- e. Sometimes
- f. Rarely or Never

Answer choices a-c for Question 13 (condom use) were categorized as healthy. Answer choices d-f were considered unhealthy.

Question #22. For both men and women, regarding your actions related to possible pregnancy:

- a. I am not having sexual intercourse at this time in my life
- b. Either my partner or I cannot become pregnant
- c. My partner or I are pregnant, we are trying to have a baby now, or we would welcome a pregnancy if it occurred now
- d. My partner or I are correctly and consistently using birth control ALL the time
- e. My partner or I are correctly using birth control MOST of the time
- f. My partner or I are correctly using birth control SOME of the time
- g. My partner and I are not using birth control

For question 22 (pregnancy planning), the answer choices a-d are considered healthy. Unhealthy answer choices were e-g.



Results

Overall, the percentage of change in healthy HRA responses for the sexual health questions remained fairly constant from 2015 to 2016 (Table 1). Reported healthy condom use behavior increased by 1%.

Table I. Percent Change in Sexual Health HRA Responses, 2016 HRA^a

Health Behavior	2015	2016	Percent (%) Change
	(N=238,431)	(N=210,031)	
	Percent	Percent	
Condom Use	84.0	84.9	1.0
Pregnancy Planning	84.9	85.1	0.3

^a May not exactly total 100 due to rounding error.

^aPercent Change calculation = $[(2016 \text{ Value} - 2015 \text{ Value}) / 2015 \text{ Value}] * 100$

Data source: 2016 HRA

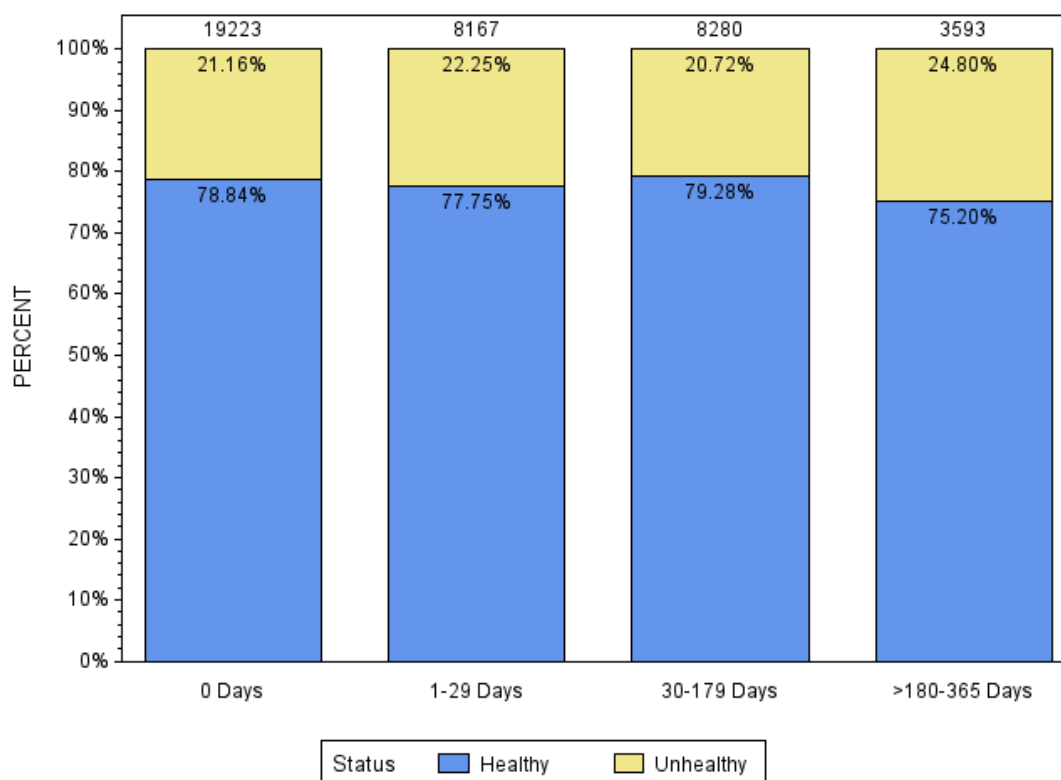
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Condom Use

Healthy condom use behavior varied by two percent between the four time periods away from home station. Active duty and reserve Marines away from their home station for 180-365 days had the lowest percentage (75%) (Figure A).

Figure A:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USMC & USMCR Condom Usage Response Profile
 39,263 records

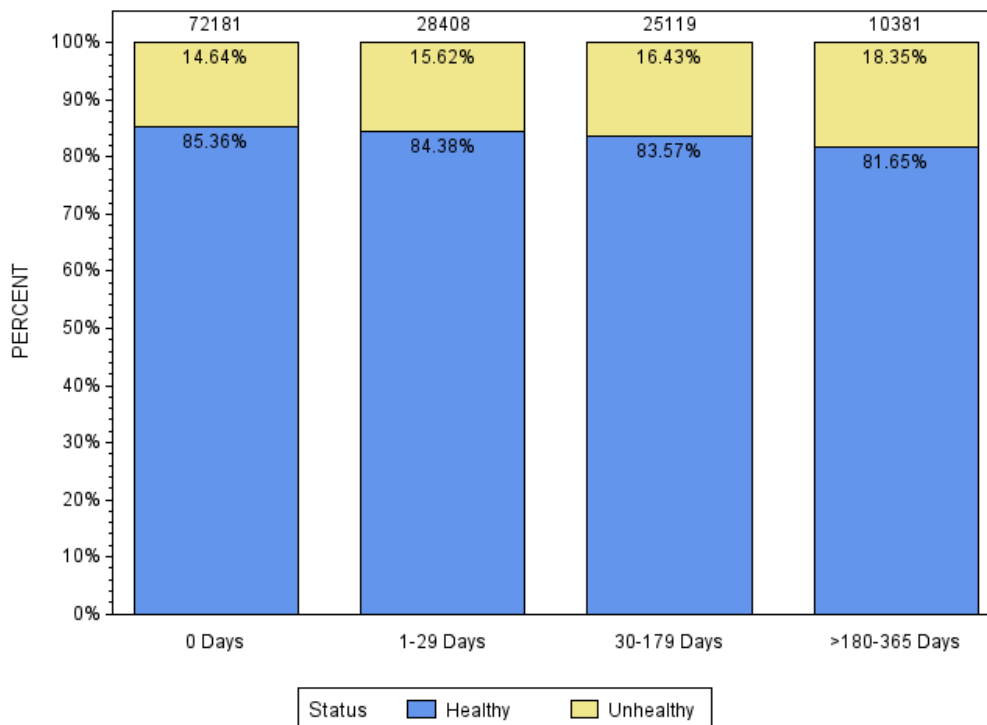


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Healthy behaviors related to condom use decreased slightly among Active duty and reserve Sailors as time increased away from the home station (85% to 80% respectively) (Figure B).

Figure B:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USN & USNR Condom Usage Response Profile
 136,089 records

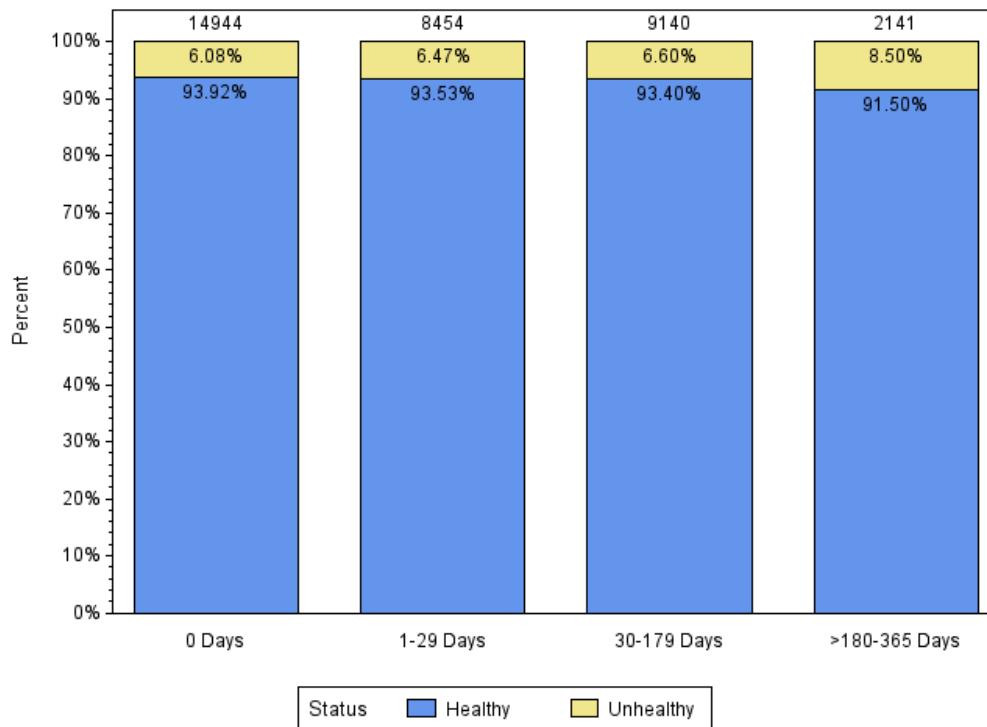


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Healthy behaviors related to condom use among Active duty and reserve USCG remained constant as time away from the home station increased from 0 days to less than 180 days (93%) and decreased slightly after 180 days (Figure C).

Figure C:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USCG & USCGR Condom Usage Response Profile
 34,679 records

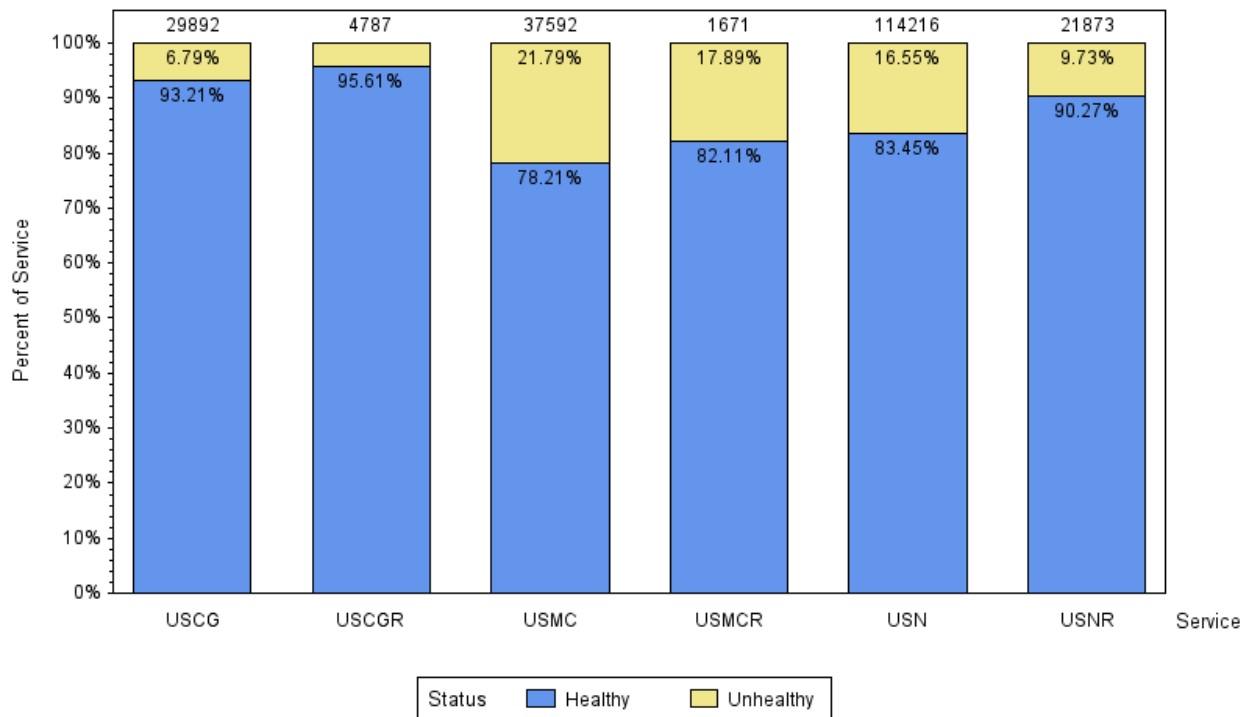


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Healthy behaviors related to condom use was highest for the USCGR and USCG at 96% and 93%, respectively. Healthy behaviors reported for the USNR and USN were 90% and 83%, respectively. The USMCR and USMC reported the lowest number of healthy behaviors at 82% and 78%, respectively (Figure D).

Figure D:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
Condom Usage Response Profile by Service Component
 210,031 records

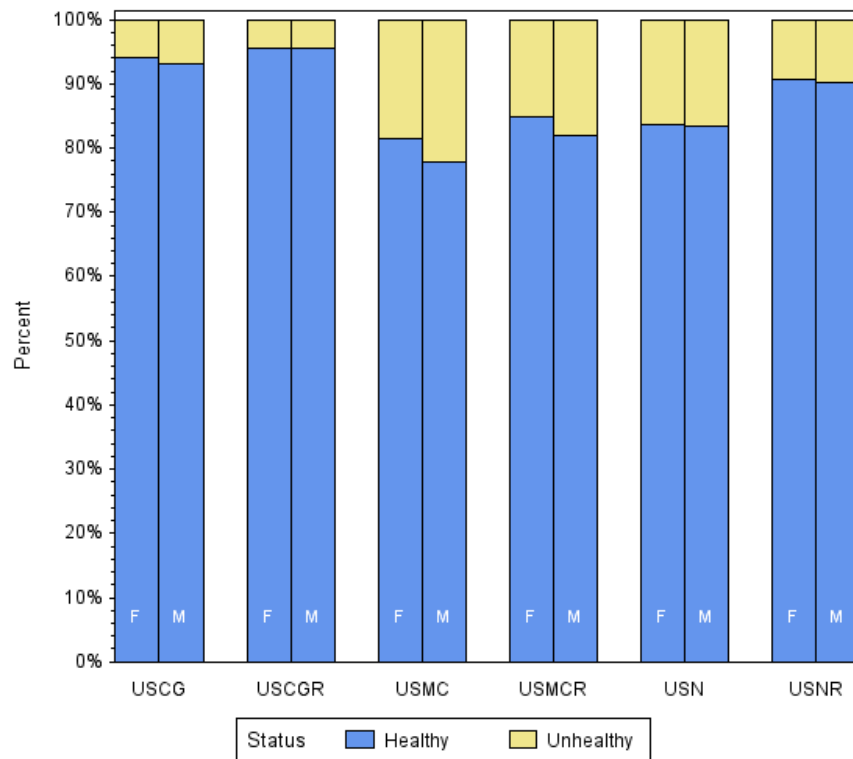


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Healthy behaviors related to condom use were fairly consistent between men and women across all services, with the exception of the USMC and USMCR, where females reported 3% higher healthy behaviors compared to males (Figure E, Table II). Active duty USMC males were the group least likely to report a healthy score (78%).

Figure E:
Condom Use Response Profile by Service Component and Gender
 210,031 records



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Table II. Condom Use Healthy Responses by Service Component and Gender, 2016 HRA

Service	Gender	Percent (%)	n
USCG	Female	94.1	4,707
	Male	93.0	25,185
USCGR	Female	95.5	819
	Male	95.6	3,968
USMC	Female	81.6	3,609
	Male	77.9	33,983
USMCR	Female	84.9	132
	Male	81.9	1,539
USN	Female	83.6	25,645
	Male	83.4	88,571
USNR	Female	90.7	4,921
	Male	90.1	16,952

Data source: 2016 HRA

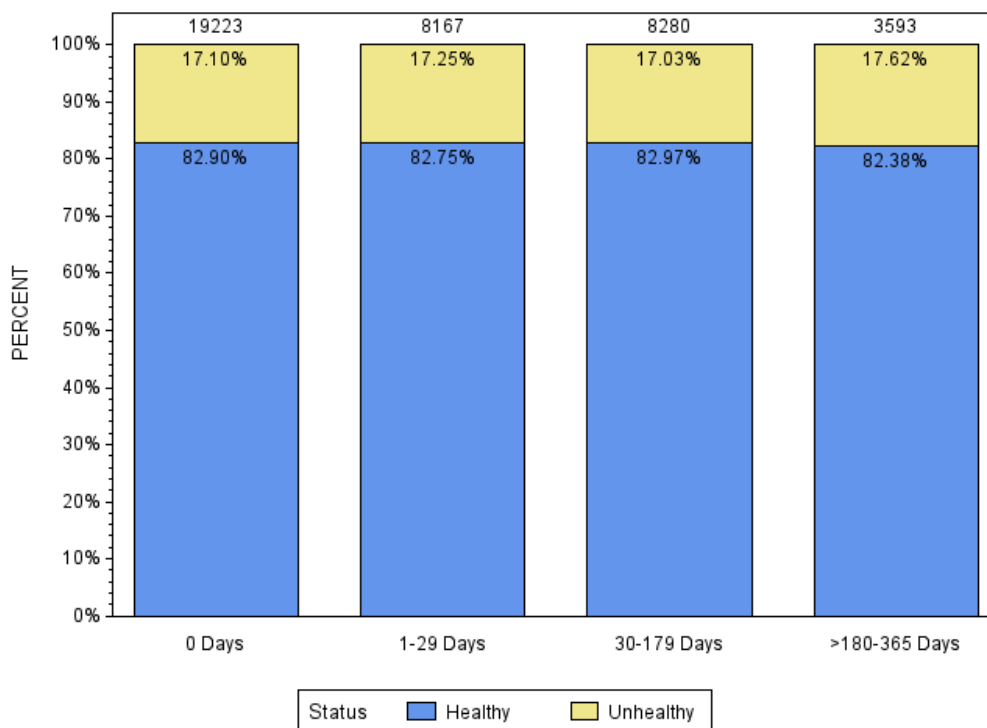
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Pregnancy Planning

There was no change in healthy behaviors related to pregnancy planning as time away from the home station increased (approximately 83% for all time periods) for Active duty and reserve USMC (Figure F).

Figure F:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USMC & USMCR Pregnancy Planning Response Profile
 39,263 records

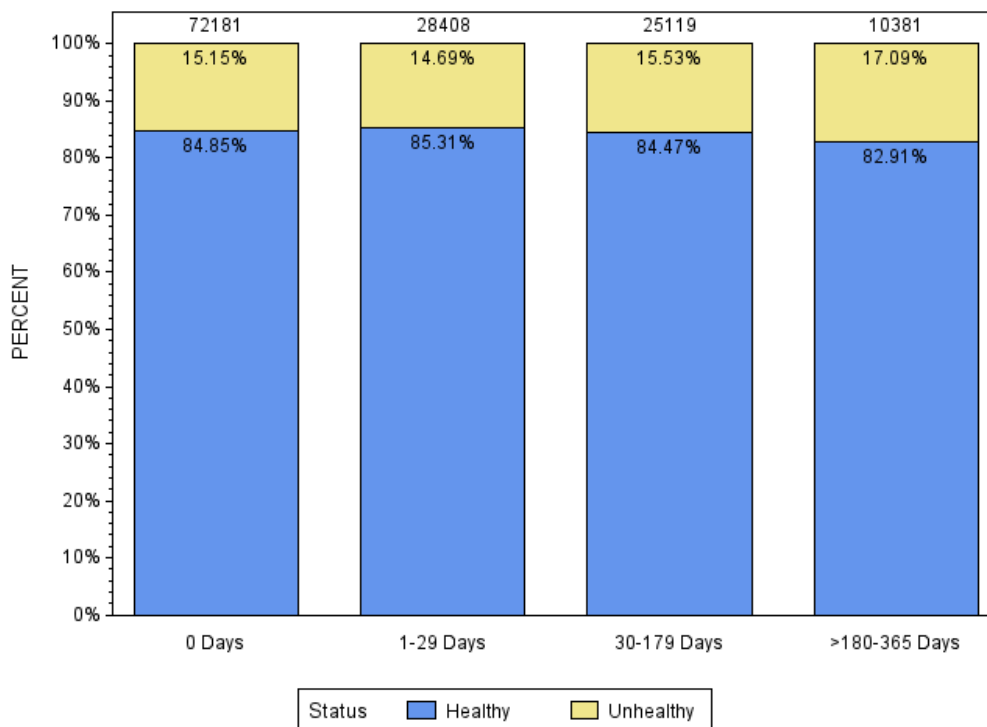


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Among Active duty and reserve Sailors, healthy behaviors regarding pregnancy planning also remained fairly constant as time away from home station increased (Figure G).

Figure G:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USN & USNR Pregnancy Planning Response Profile
 136,089 records

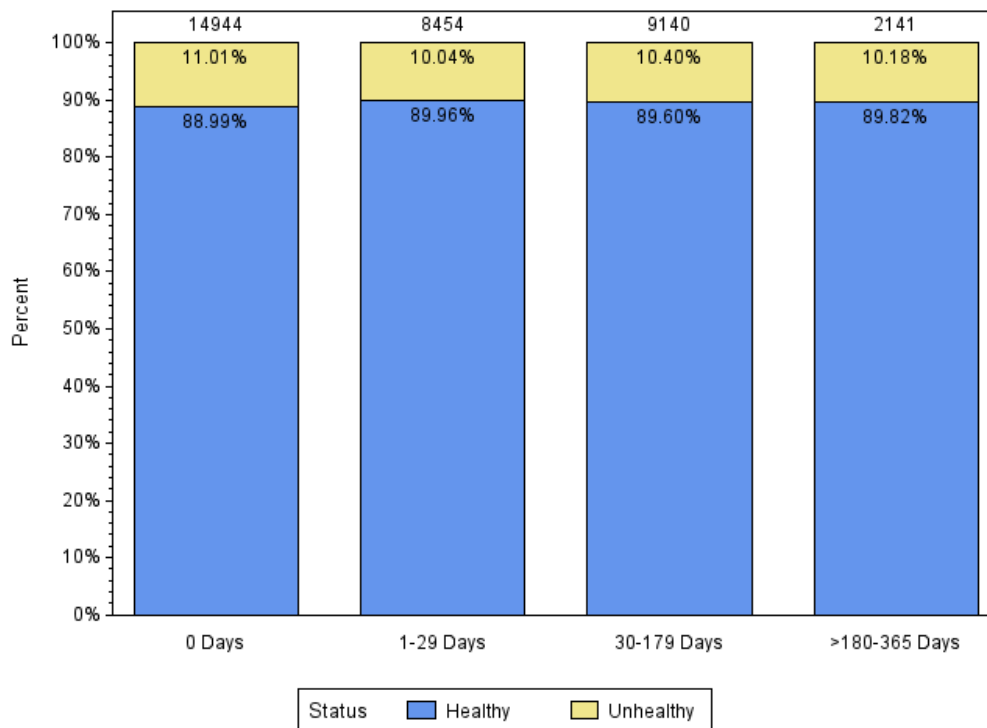


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For the USCG and USCGR, healthy behaviors regarding pregnancy planning also remained constant across time away from home station (89%) (Figure H).

Figure H:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
USCG & USCGR Pregnancy Planning Response Profile
 34,679 records

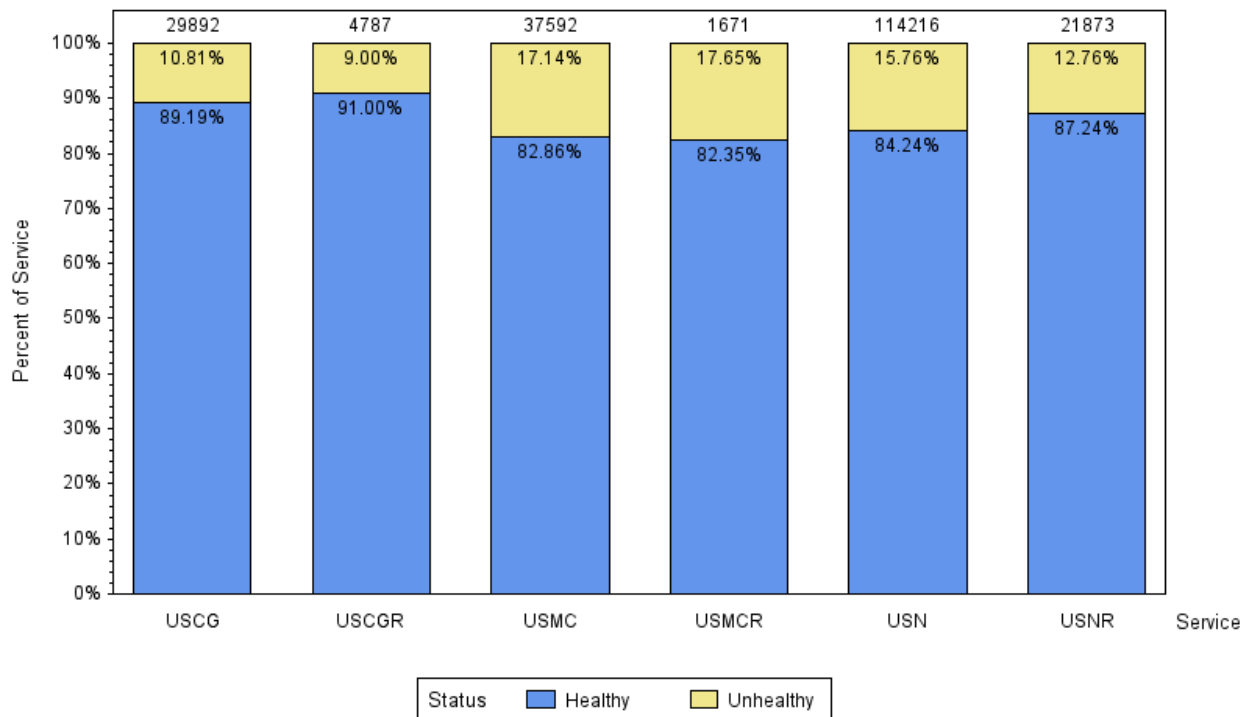


Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 19 April 2017



Healthy behaviors related to pregnancy planning was highest for the USCGR and USCG at 91% and 89%, respectively. Healthy behaviors reported for the USNR and USN were 87% and 84%, respectively. The USMCR and USMC reported the lowest number of healthy behaviors at 82% and 83%, respectively (Figure I).

Figure I:
Self-Reported Health Risk Assessment Data, 01 Jan - 31 Dec 2016
Pregnancy Planning Response Profile by Service Component
 210,031 records

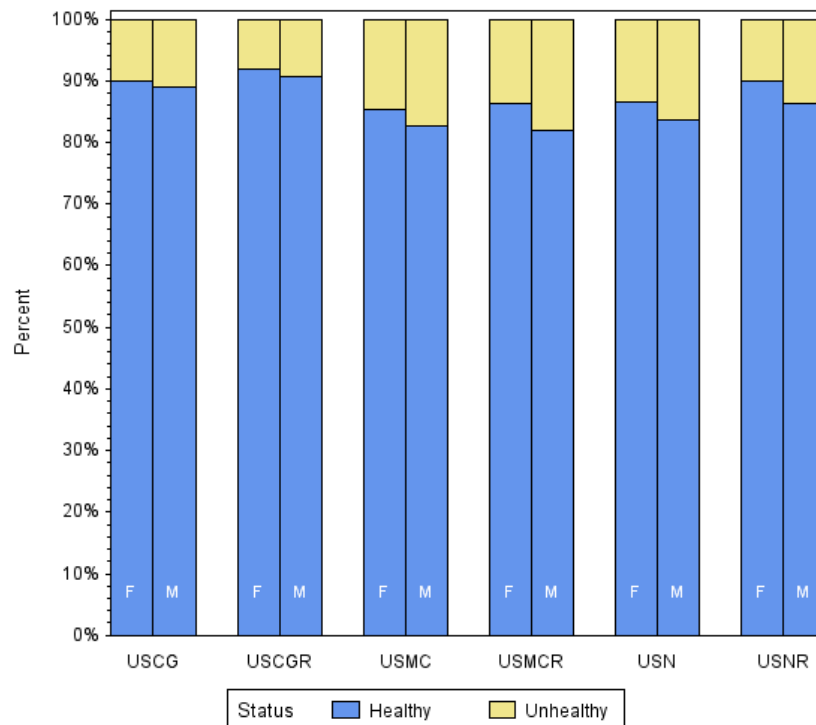


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Healthy behaviors related to pregnancy planning was consistent between males and females within the USCG and the USCGR. For all Marine and Navy components, females reported more healthy behaviors compared to males (Figure J and Table III).

Figure J:
Pregnancy Planning Response Profile by Service Component and Gender
 210,031 records



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Table III. Pregnancy Planning Healthy Responses by Service Component and Gender, 2016 HRA

Service	Gender	Percent (%)	n
USCG	Female	90.0	4,707
	Male	89.0	25,185
USCGR	Female	91.9	819
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	Male	82.6	33,983
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Data source: 2016 HRA

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Discussion

Strengths and Limitations

Anonymity is a key strength of the HRA, making it more likely that participants will answer honestly about risky behaviors in which they engage. Taking the assessment is a matter of a commands' voluntary implementation of the HRA process, in addition to fact that completing the questionnaire is voluntary for every individual. As such, some overestimation of positive behaviors and underestimation of negative behaviors may occur. It is possible for an individual to complete the questionnaire multiple times, as there is no way to block or detect duplicate entries, although there is little individual incentive to do this. It is also difficult to directly compare service components because the demographic characteristics that influence health behavior, as described earlier, vary significantly. Records collected by commands using the stand-alone version may not have all been sent to NMCPHC and, consequently, were not included in the master data set.

Notes

Since 1999, an active duty sailor or marine was diagnosed with human immunodeficiency virus (HIV) about every four days resulting in about 100 cases per year. However, in 2016 only 75 cases were detected and the seroconversion rate among active duty sailors fell from 32 per 100,000 in 2014 to 25 per 100,000 in 2016.¹ In 2016, over 7,500 active duty sailors and marines were diagnosed with syphilis, gonorrhea, or chlamydia.² The most reliable way to avoid sexually transmitted infections (STIs), including HIV, is to abstain from sexual activity or to be in a long-term mutually monogamous relationship with an uninfected partner. For people who engage in sex outside of a long-term mutually monogamous relationship, male latex condoms, worn correctly and every time, reduce the risk of acquiring or transmitting HIV, syphilis, gonorrhea, chlamydia, chancroid, genital herpes, trichomoniasis and human papillomavirus. Inconsistent use of condoms (i.e. not using them “always”) can lead to a STI because transmission can occur from a single sexual encounter (vaginal, oral, or anal sex) with an infected partner.

Unplanned pregnancies are common among military members aged 18-24.³ In 2014, four of 10 (43%) of surveyed active duty enlisted Navy women who had become pregnant said their last pregnancy was unplanned. Non-use of contraception accounted for about seven of 10 of these unplanned pregnancies and contraception failure (inconsistent use of oral contraceptive pills or condoms) accounted for nearly all others.



References:

1. NMCPHC, Navy Bloodborne Infection Management Center (NBIMC). HIV Seroconversion Data. 2016 (Unpublished).
2. NMCPHC EpiData Center. Sexually Transmitted Infections Annual Report 2016.
3. Navy Personnel Research, Studies, and Technology. 2014 Navy Pregnancy and Parenthood Survey. (unpublished).

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