

NMCPHC Workplace Health Risk Assessment: Sexual Health Supplement, CY 2017

Executive Summary

The Navy and Marine Corps Public Health Center (NMCPHC) Workplace Health Risk Assessment (HRA) is a 21-question anonymous self-assessment of the most common health risk behaviors. It provides users with an individualized assessment of their health-related behaviors and credible sources of web-based health information, provides data to health educators to plan and implement workplace and community health promotion 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 201,968 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 2017 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 2017 by 130,838 USN and USNR service members, 33,320 USMC and USMCR service members, and 37,810 USCG and USCGR service members who responded to the following sexual health questions on the HRA:

Question #12 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 12 (condom use) were categorized as healthy. Answer choices d-f were considered unhealthy.

Question #21 For both men and women, pregnancy is a life-changing event for mother and father. 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

Answer choices a-d for Question 21 (pregnancy planning) were categorized as healthy. Answer choices e-g were considered unhealthy.



Results

A total of 201,968 responses were analyzed for the sexual health supplement. Overall, the percent change in healthy sexual health HRA responses increased from 2016 to 2017 (Table 1). Reported healthy condom use and pregnancy planning behaviors increased by 1.4%.

Table 1. Percent Change in Sexual Health HRA Responses, CY 2017

HRA^a

Health Behavior	2016 (N=210,156)	2017 (N=201,968)	Percent (%) Change
Condom Use	84.9	86.1	1.4
Pregnancy Planning	85.1	86.3	1.4

^aPercent Change calculation = $[(2017 \text{ Value} - 2016 \text{ Value}) / 2016 \text{ Value}] * 100$

Data source: 2017 HRA

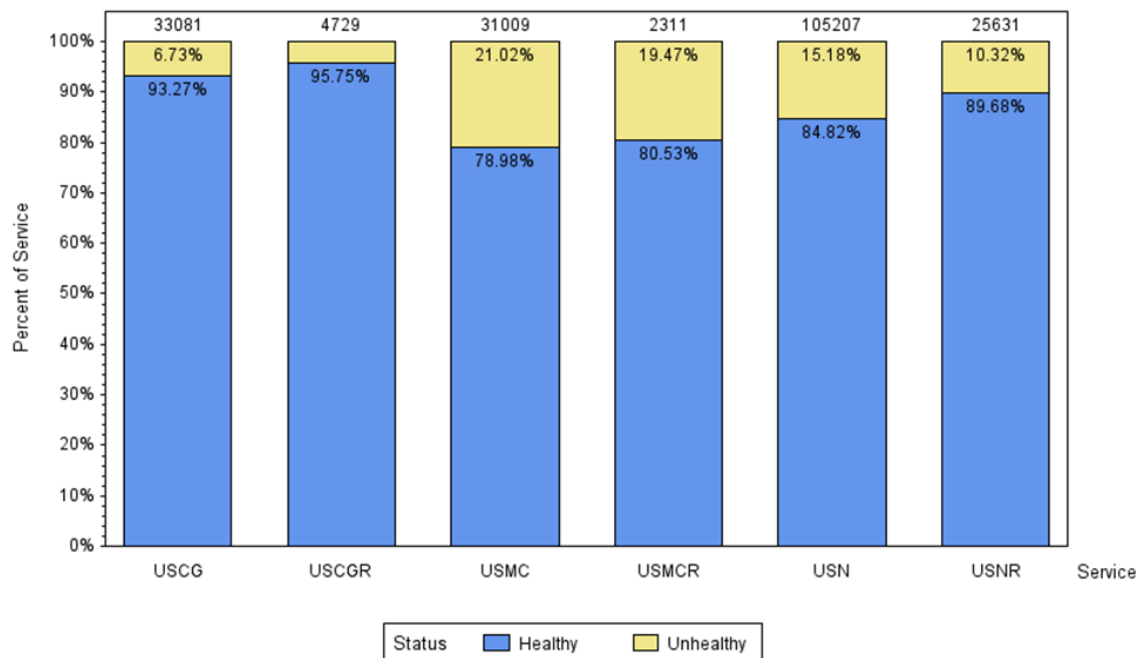
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 6 March 2018.



Condom Use

Healthy behaviors related to condom use were highest for the USCGR and USCG at 95.8% and 93.3%, respectively. Healthy behaviors reported for the USNR and USN were 89.7% and 84.8%, respectively. The USMCR and USMC reported the lowest number of healthy behaviors at 80.5% and 79.0%, respectively (Figure 1).

Figure 1. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 Condom Usage Response Profile by Service Component
 201,968 Records



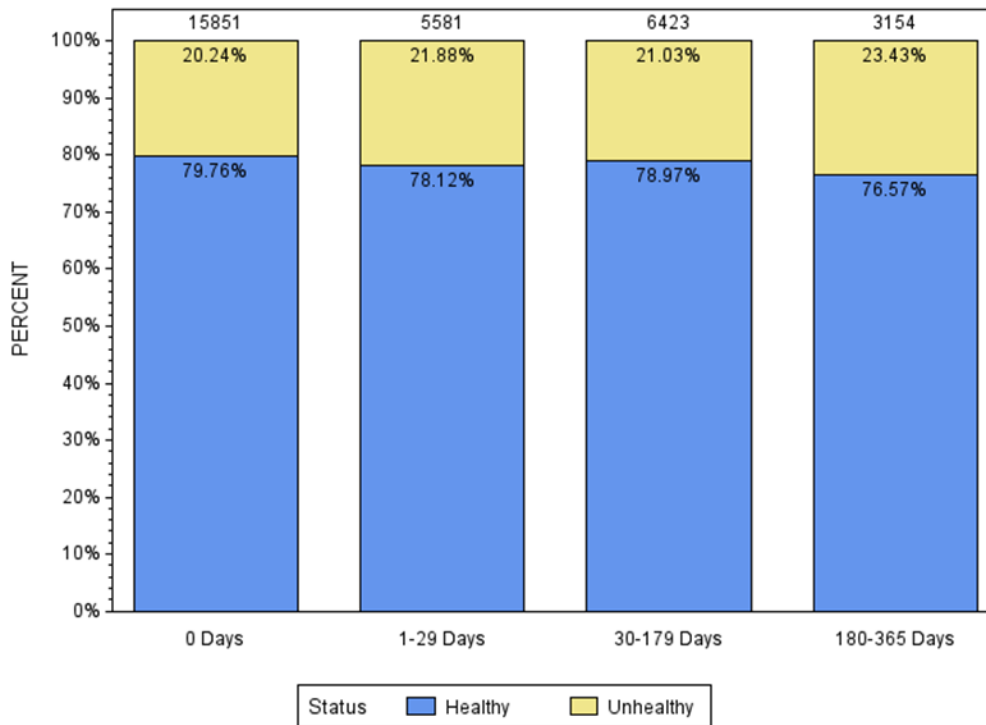
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Healthy condom use behavior was similar for USMC and USMCR members (Figures 2 and 3). USMC members away from their home station for 180-365 days had the lowest percentage of healthy behaviors for condom use (76.6%).

Figure 2. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USMC Condom Usage Response Profile
31,009 Records

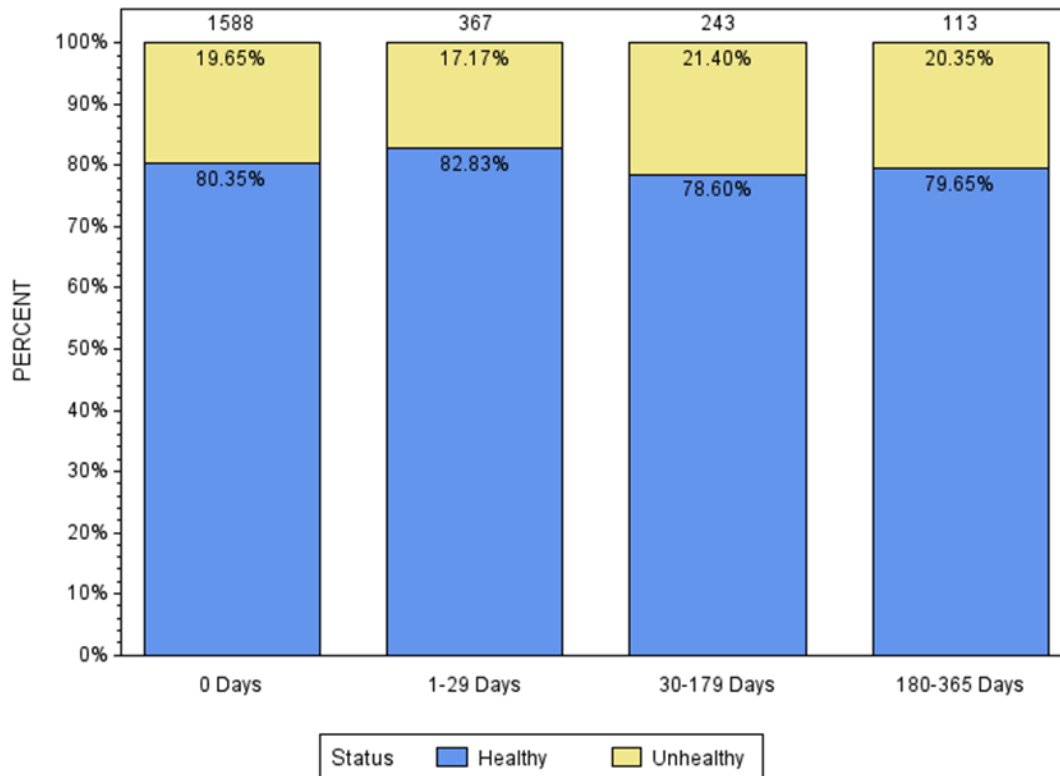


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 3. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USMCR Condom Usage Response Profile
2,311 Records



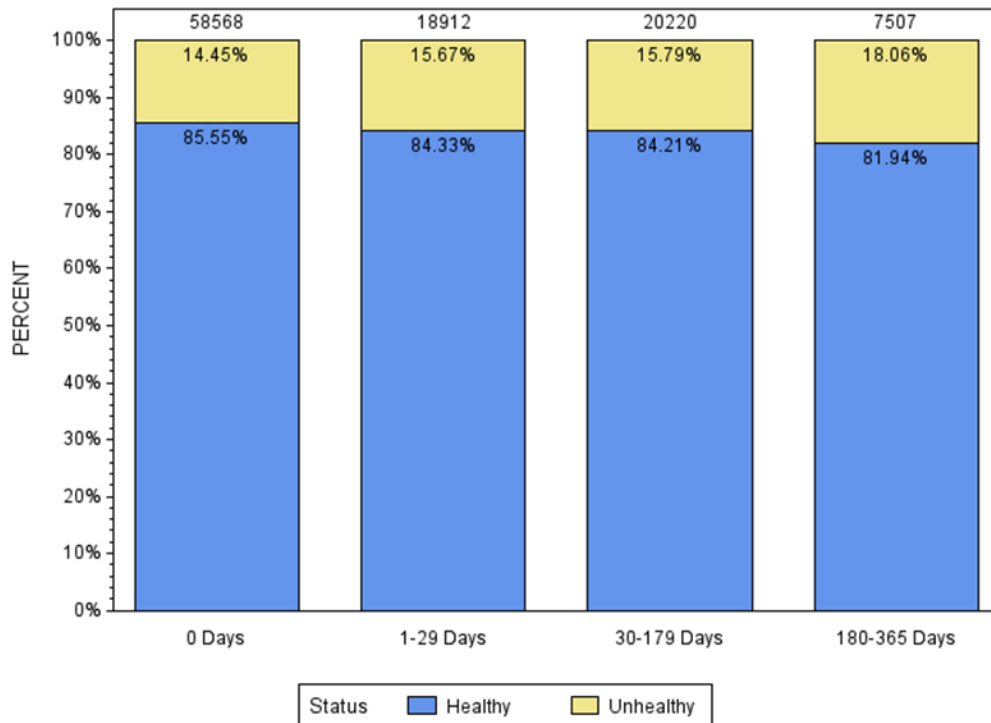
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Healthy behaviors related to condom use were lower for USN members than USNR members (Figures 4 and 5). USN members away from their home station for 180-365 days had the lowest percentage of healthy behaviors for condom use (81.9%).

Figure 4. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 USN Condom Usage Response Profile
 105,207 Records

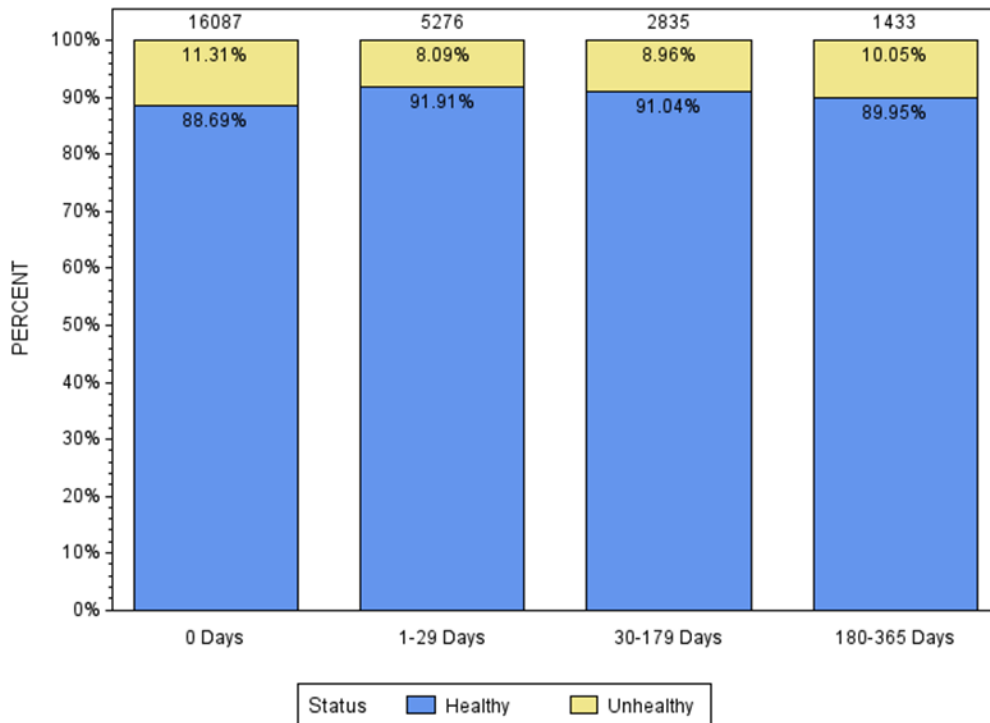


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 5. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USNR Condom Usage Response Profile
25,631 Records



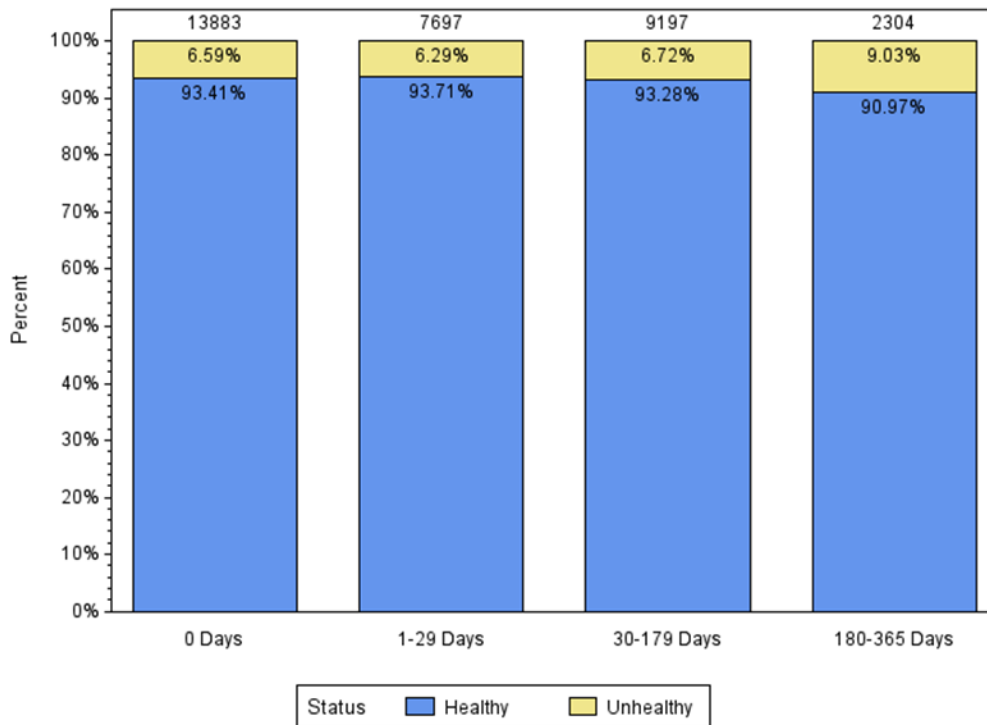
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Healthy behaviors related to condom use were lower for USCG members than USCGR members (Figures 6 and 7). USCG members away from their home station for 180-365 days had the lowest percentage of healthy behaviors for condom use (91.0%).

Figure 6. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USCG Condom Usage Response Profile
33,081 Records

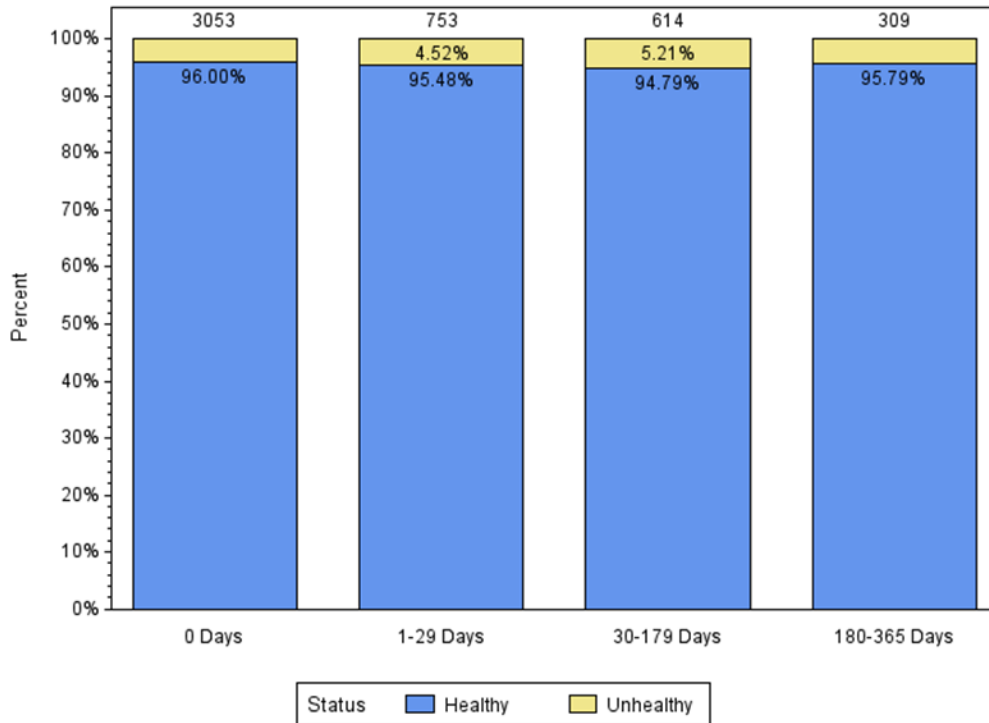


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 7. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USCGR Condom Usage Response Profile
4,729 Records



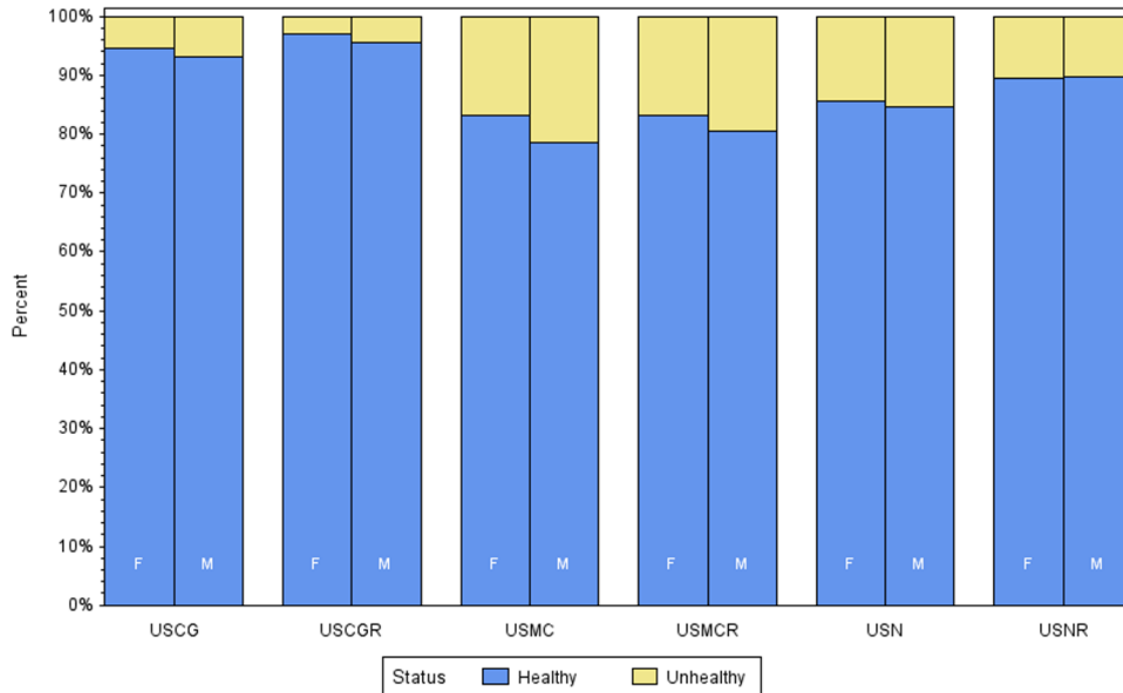
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Healthy behaviors related to condom use were fairly consistent between men and women across all services, with the exception of the USMC, where females reported 4.6% higher healthy behaviors compared to males (Figure 8, Table 2). Active duty USMC males were the group least likely to report a healthy behaviors for condom use (78.5%).

Figure 8. Condom Use Response Profile by Service Component and Gender
 201,968 Records



Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Table 2. Condom Use Healthy Responses by Service Component and Gender, CY 2017 HRA

Service	Gender	Percent (%)	N
USCG	Female	94.5	5,286
	Male	93.1	27,795
USCGR	Female	96.9	802
	Male	95.5	3,927
USMC	Female	83.1	3,140
	Male	78.5	27,869
USMCR	Female	83.1	118
	Male	80.4	2,193
USN	Female	85.7	24,241
	Male	84.6	80,966
USNR	Female	89.5	5,814
	Male	89.7	19,817

Data source: 2017 HRA

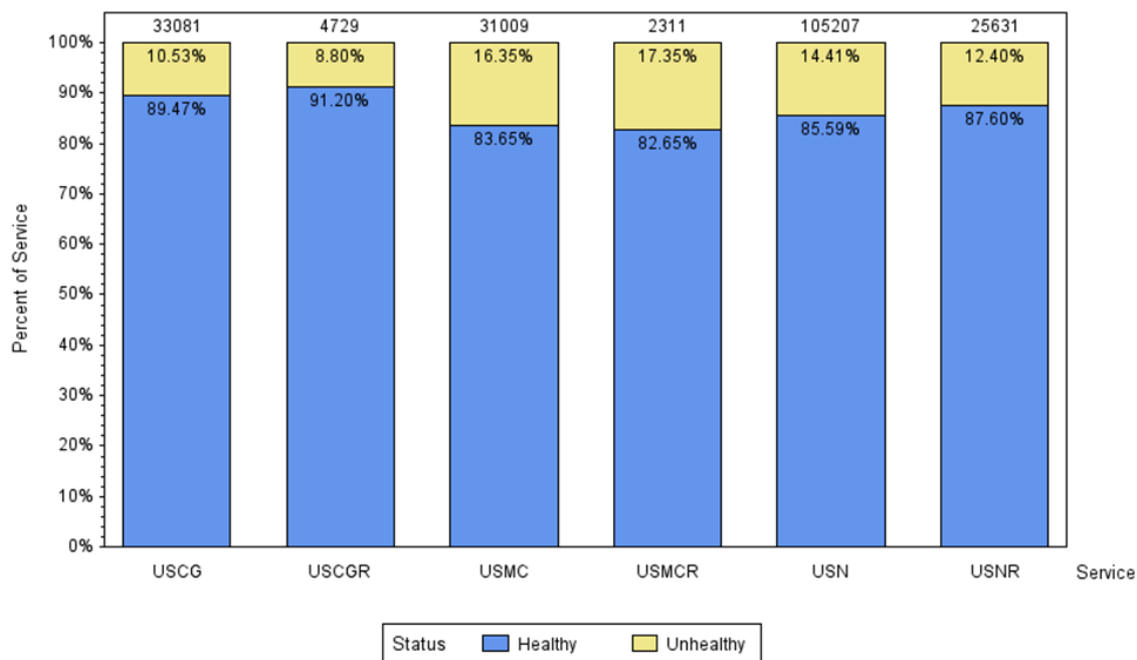
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 6 March 2018.



Pregnancy Planning

Healthy behaviors related to pregnancy planning were highest for the USCGR and USCG at 91.2% and 89.47%, respectively. Healthy behaviors reported for the USNR and USN were 87.6% and 85.59%, respectively. The USMC and USMCR reported the lowest number of healthy behaviors at 83.7% and 82.65%, respectively (Figure 9).

Figure 9. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 Pregnancy Planning Response Profile by Service Component
 201,968 Records



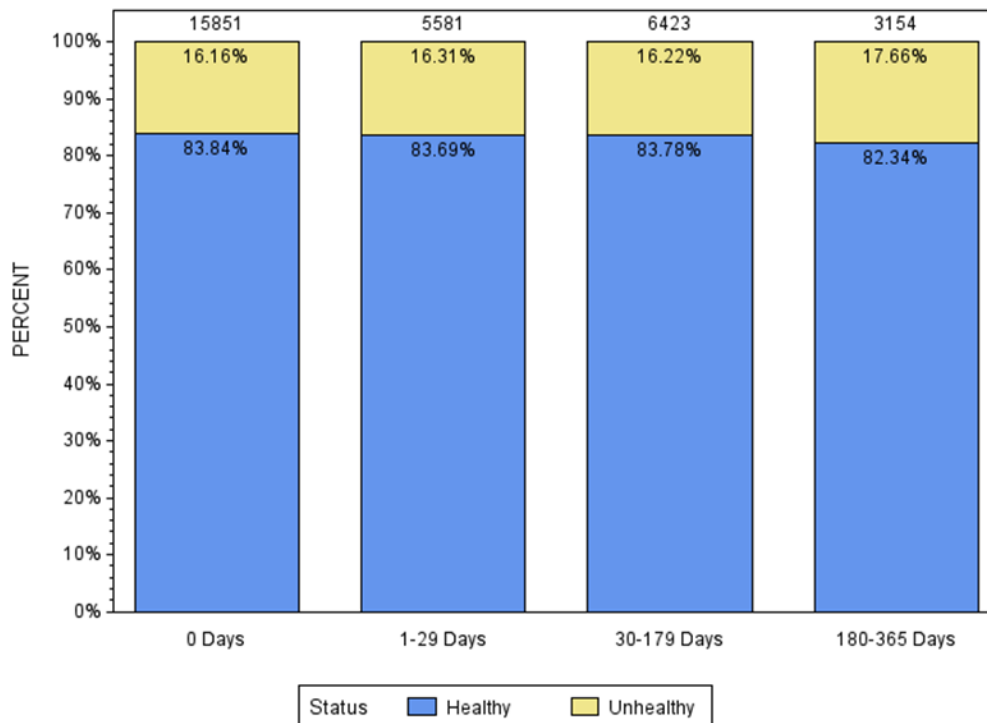
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



There was no significant change in healthy behaviors related to pregnancy planning as time away from the home station increased for USMC members (Figure 10). USMCR members saw the largest proportion of unhealthy pregnancy planning behaviors in those who were away from home station for 180-365 days (Figure 11).

Figure 10. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 USMC Pregnancy Planning Response Profile
 31,009 Records

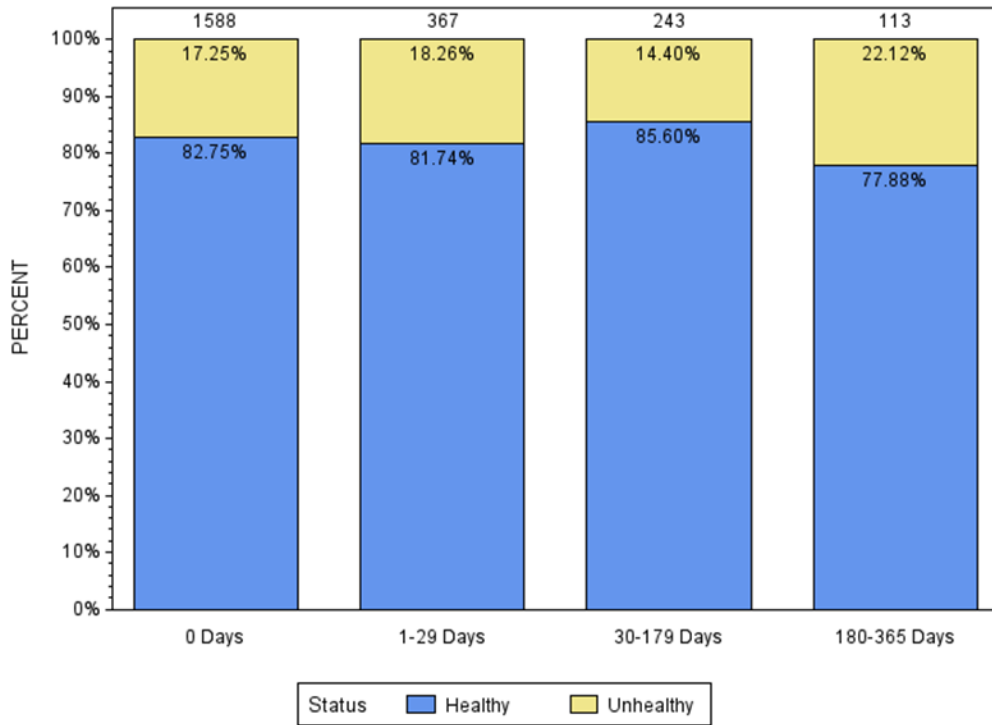


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 11. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USMCR Pregnancy Planning Response Profile
2,311 Records



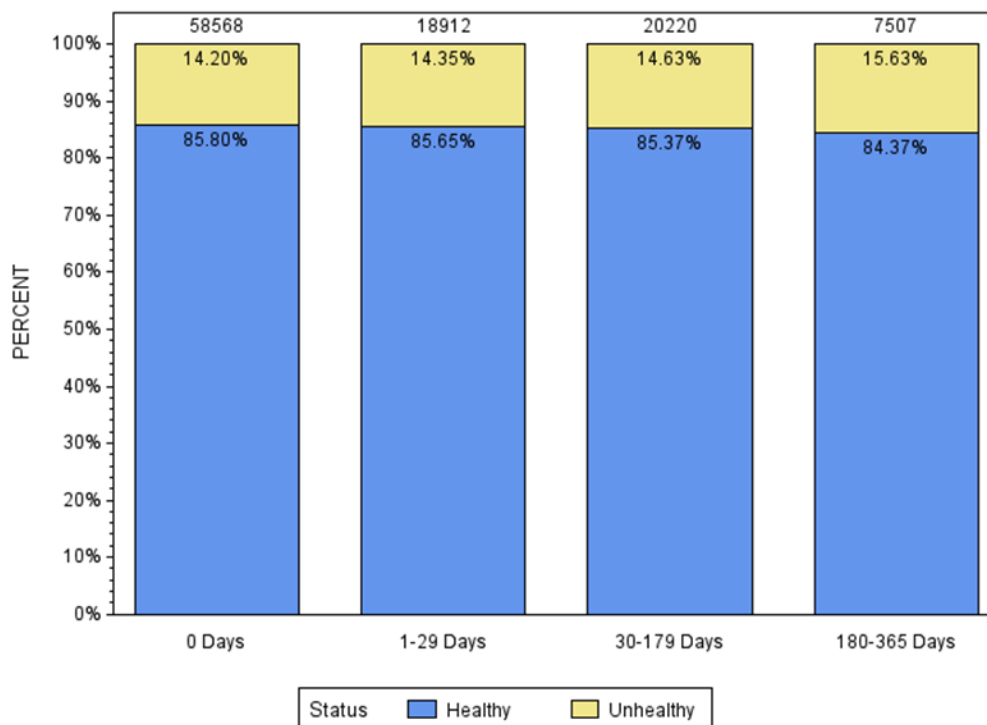
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Among USN and USNR members, healthy pregnancy planning behaviors remained fairly constant as time away from home station increased (Figures 12 and 13). USN members away from home station 180-365 had the most reported unhealthy pregnancy planning behaviors (15.6%).

Figure 12. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 USN Pregnancy Planning Response Profile
 105,207 Records

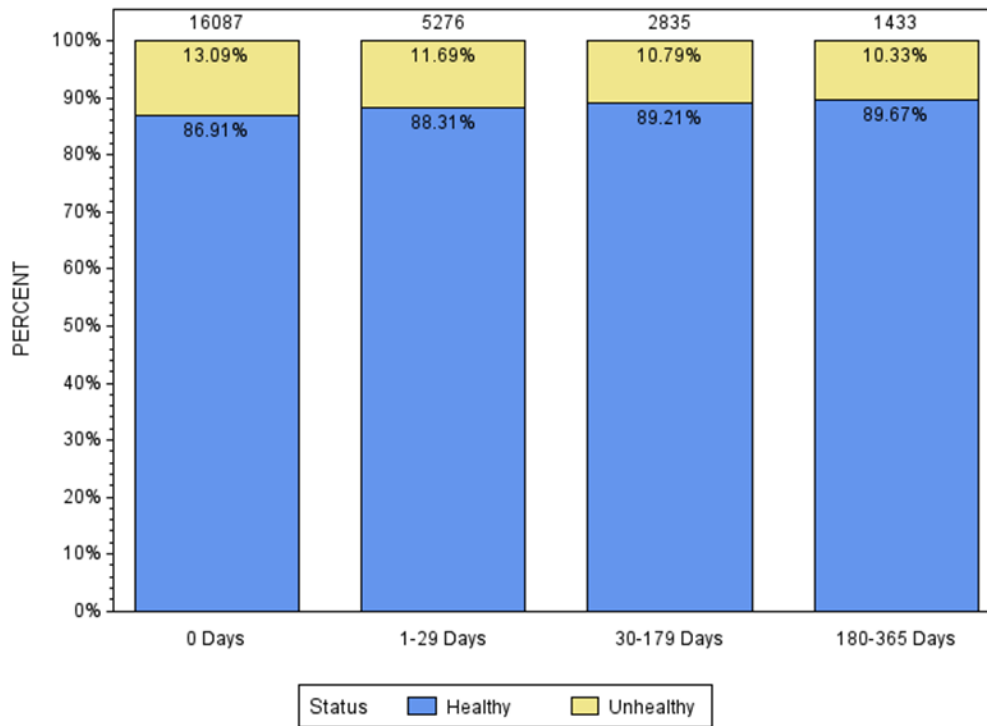


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 13. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USNR Pregnancy Planning Response Profile
25,631 Records



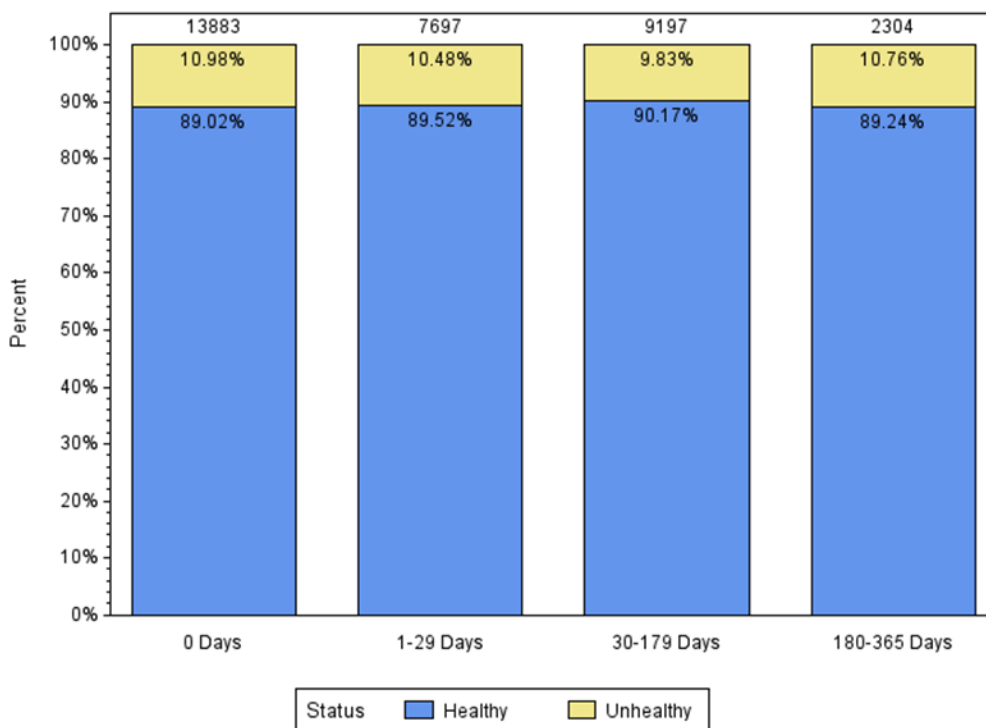
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



For the USCG and USCGR, healthy behaviors regarding pregnancy planning remained constant across time away from home station (Figures 14 and 15). USCG members who did not leave home station in 2017 had the most reported unhealthy pregnancy planning behaviors (11.0%).

Figure 14. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
 USCG Pregnancy Planning Response Profile
 33,081 Records

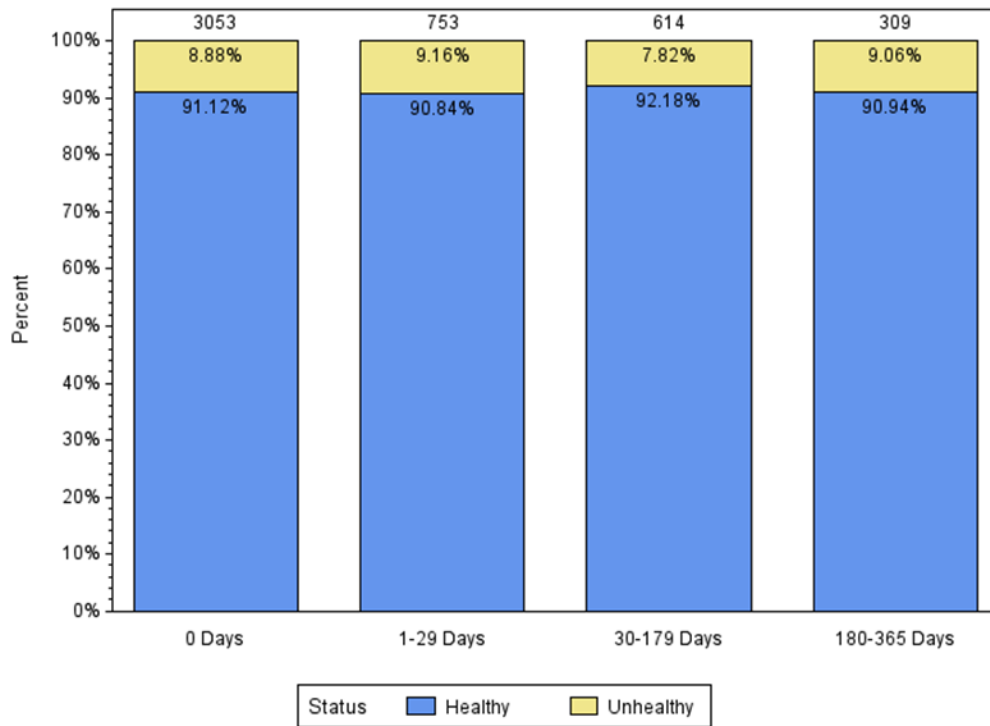


Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Figure 15. Self-Reported Health Risk Assessment Data, 01 Jan-31 Dec 2017
USCGR Pregnancy Planning Response Profile
4,729 Records



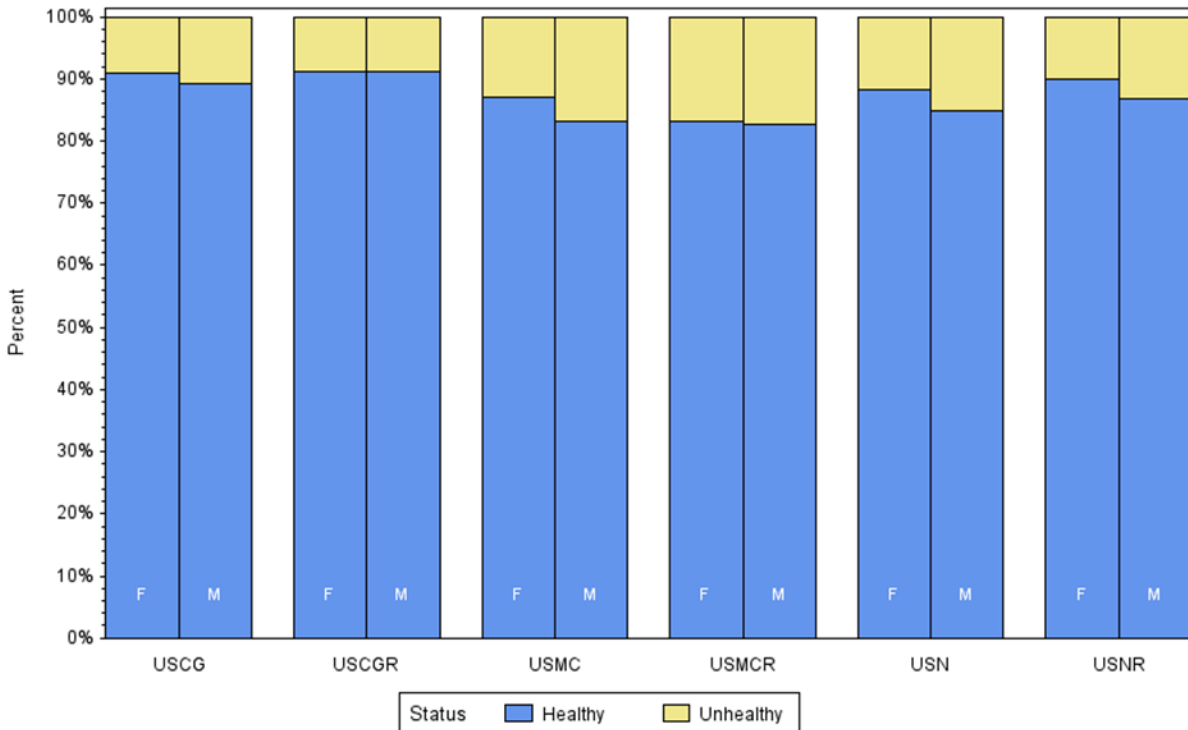
Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Healthy behaviors related to pregnancy planning were consistent between males and females within the USCG, USCGR, and USMCR. For USN, USNR, and USMC, females reported higher healthy pregnancy planning behaviors by at least 3% more than males (Figure 16 and Table 3).

Figure 16. Pregnancy Planning Response Profile by Service Component and Gender
 201,968 Records



Data source: 2017 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 7 March 2018.



Table 3. Pregnancy Planning Healthy Responses by Service Component and Gender, CY 2017 HRA

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Data source: 2017 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 the 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. In 2017, 83 new HIV cases were detected and the HIV seroconversion rate among active duty Sailors rose from 25 per 100,000 (2016) to 28 per 100,000 (2017).¹ In 2017, rates and cases of syphilis, gonorrhea and chlamydia rose compared to 2016, with over 9,200 cases reported among active duty Sailors and Marines.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 vaginal, oral, or anal sexual encounter with an infected partner.

Unplanned pregnancies are common among military members aged 18-24.³ In 2016, about four of 10 (41%) of surveyed active duty enlisted Navy women who had become pregnant said their last pregnancy while in the Navy 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. 2017 (Unpublished).
2. NMCPHC EpiData Center. Sexually Transmitted Infections Annual Report 2017.
3. Navy Personnel Research, Studies, and Technology. 2016 Navy Pregnancy and Parenthood Survey. (unpublished).

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