

NMCPHC Workplace Health Risk Assessment: Sexual Health Supplement, Calendar Year 2018

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 101,565 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 2018 and 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

Data Collection and Analyses

This analysis consisted of HRAs completed in calendar year (CY) 2018, 01 January to 31 December 2018 by 75,710 USN and USNR service members (SMs), 16,097 USMC and USMCR service members, and 9,758 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 101,565 responses were analyzed for the sexual health supplement. Overall, the percent change in healthy sexual health HRA responses decreased from 2017 to 2018 (Table 1). Reported healthy condom use and pregnancy planning behaviors decreased by 3.8% and 3.0% respectively.

Health Behavior	2017 (n=201,968)	2018 (n=101,565)	Percent (%) Change
Condom Use	86.1	82.8	-3.8
Pregnancy Planning	86.3	83.7	-3.0

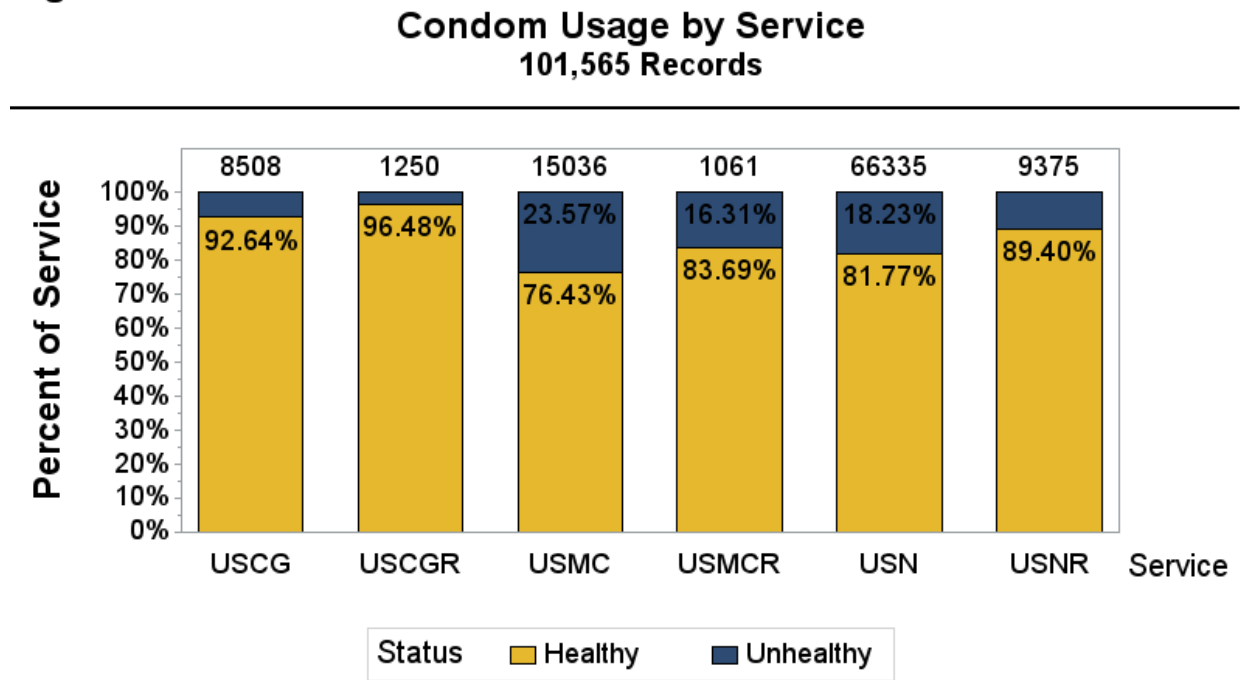
^a Percent Change calculation [(2018 Value- 2017 Value)/ (2017 Value)]*100
Data Source: 2018 HRA
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Condom Use

Healthy behaviors related to condom use were highest for the USCGR and USCG at 96.5% and 92.6%, respectively. Healthy behaviors reported for the USNR and USN were 89.4% and 81.8%, respectively. The USMCR and USMC reported the lowest number of healthy behaviors at 83.7% and 76.4%, respectively (Figure 1).

Figure 1:



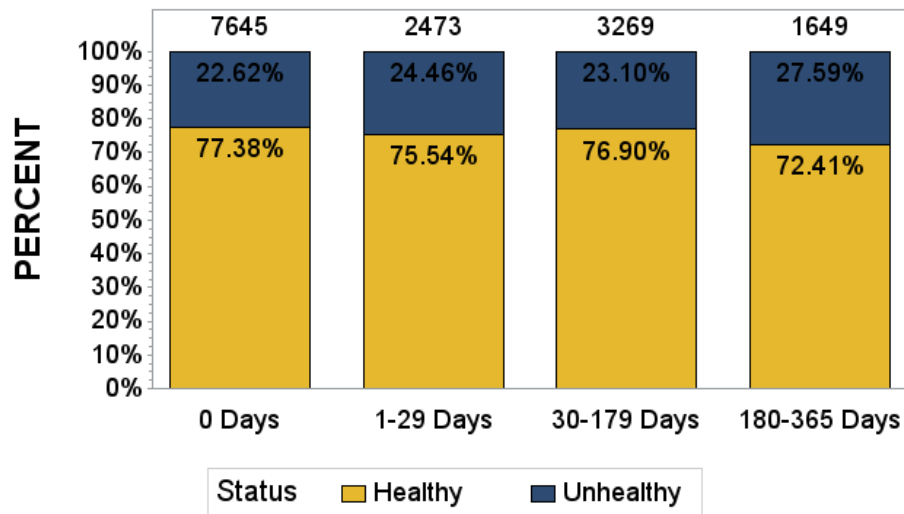
Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Healthy condom use behavior for USMC and USMCR were not all that similar. The USMCR members had a higher percentage of healthy condom usage in every category (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 (72.4%).

Figure 2:
USMC Condom Usage by Days Away from Home Station
15,036 Records

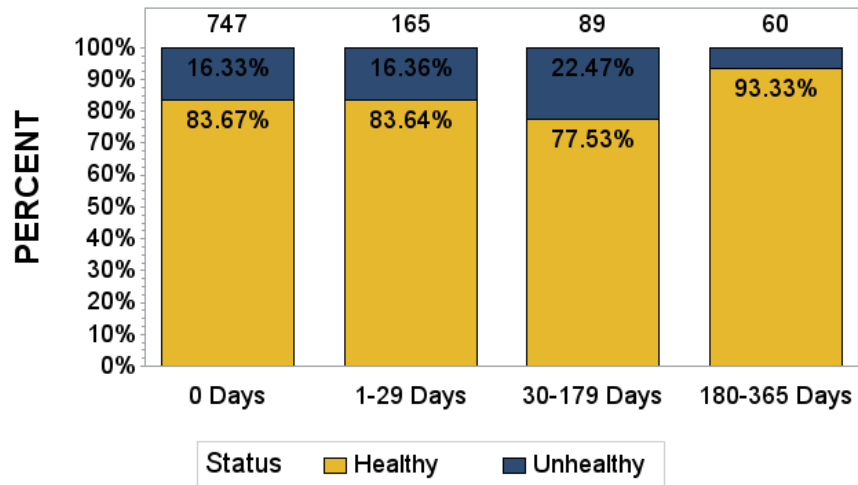


Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 3:
USMCR Condom Usage by Days Away from Home Station
1,061 Records



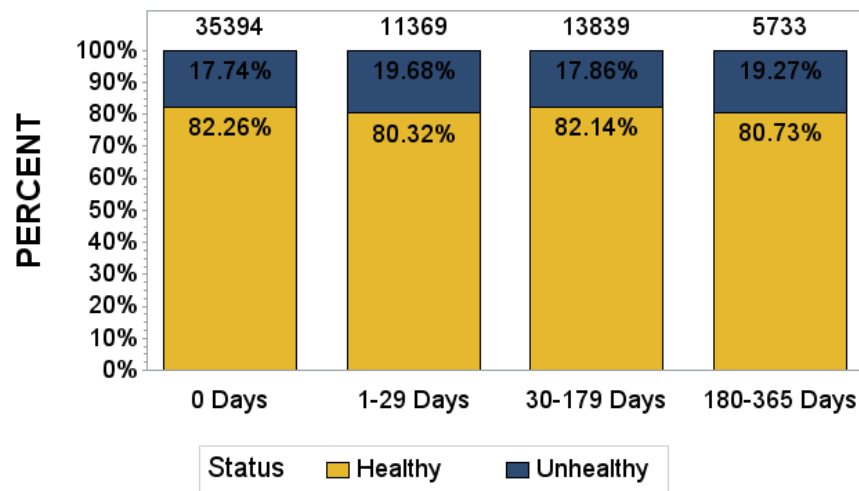
Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



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 1-29 days and 180-365 days had the lowest percentage of healthy behaviors for condom use (80.3% and 80.7%, respectively).

Figure 4:
USN Condom Usage by Days Away from Home Station
66,335 Records

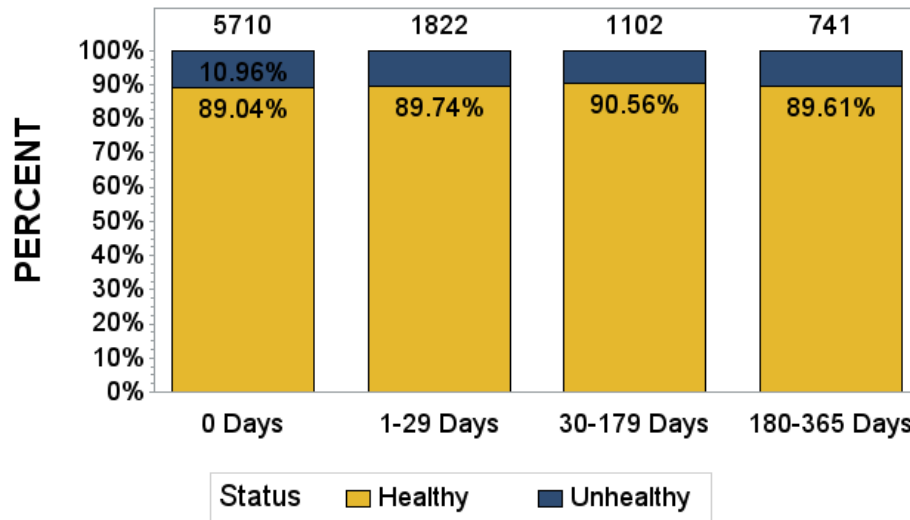


Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 5:
USNR Condom Usage by Days Away from Home Station
9,375 Records



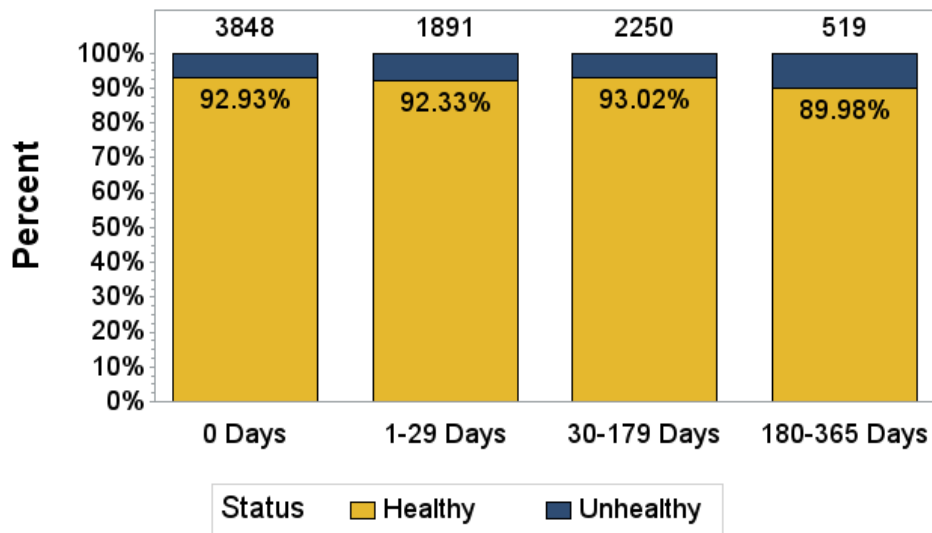
Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Healthy behaviors related to condom use were lower for USCG members than USCGR members (Figures 6 and 7). Condom usage by both USCG and USCGR members was high and never fell below 90% for all days away from home station.

Figure 6:
USCG Condom Usage by Days Away from Home Station
8,508 Records

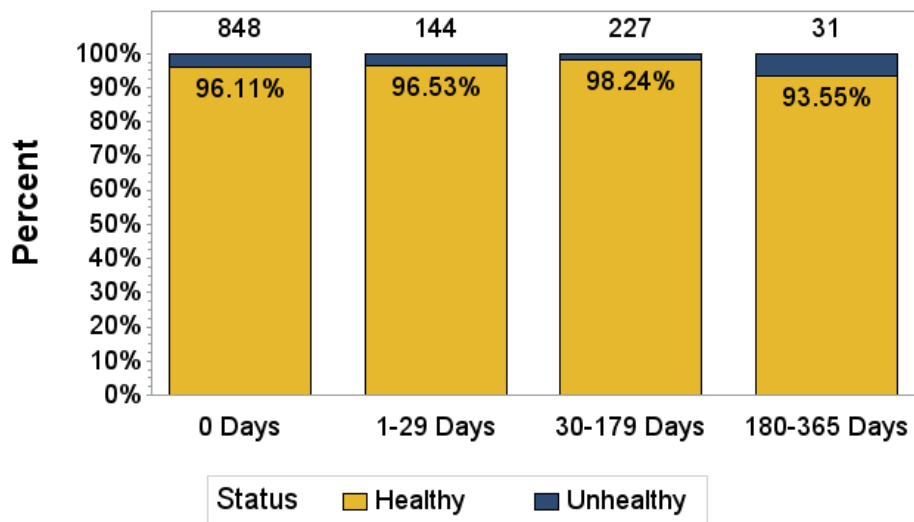


Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 7:
USCGR Condom Usage by Days Away from Home Station
1,250 Records



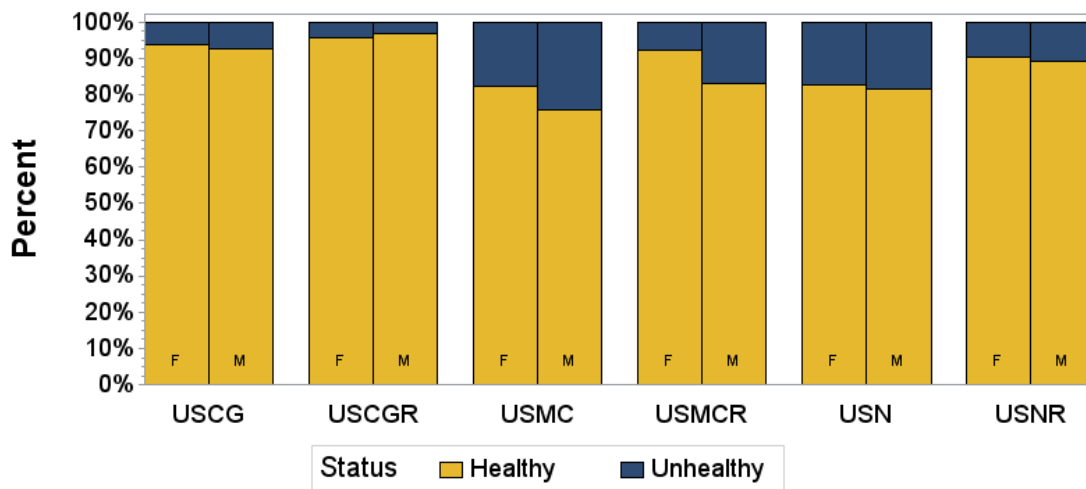
Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



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 6.5% and 8.9% higher healthy behaviors compared to males, respectively (Figure 8, Table 2). Active duty USMC males were the group least likely to report a healthy behaviors for condom use (75.9%).

Figure 8:
Condom Usage by Service Component and Gender
 101,565 Records



Data Source: 2018 HRA

Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Table 2. Healthy Condom Use Behavior Responses by Service Component and Gender, CY 2018 HRA

Service	Gender	Percent (%)	N
USCG	Female	93.7	1,166
	Male	92.5	6,716
USCGR	Female	95.7	223
	Male	96.7	983
USMC	Female	82.4	1,022
	Male	75.9	10,470
USMCR	Female	92.1	58
	Male	83.2	830
USN	Female	82.5	12,845
	Male	81.6	41,398
USNR	Female	90.4	2,079
	Male	89.1	6,302

^a Percent Change calculation [(2018 Value- 2017 Value)/ (2017 Value)]*100

Data Source: 2018 HRA

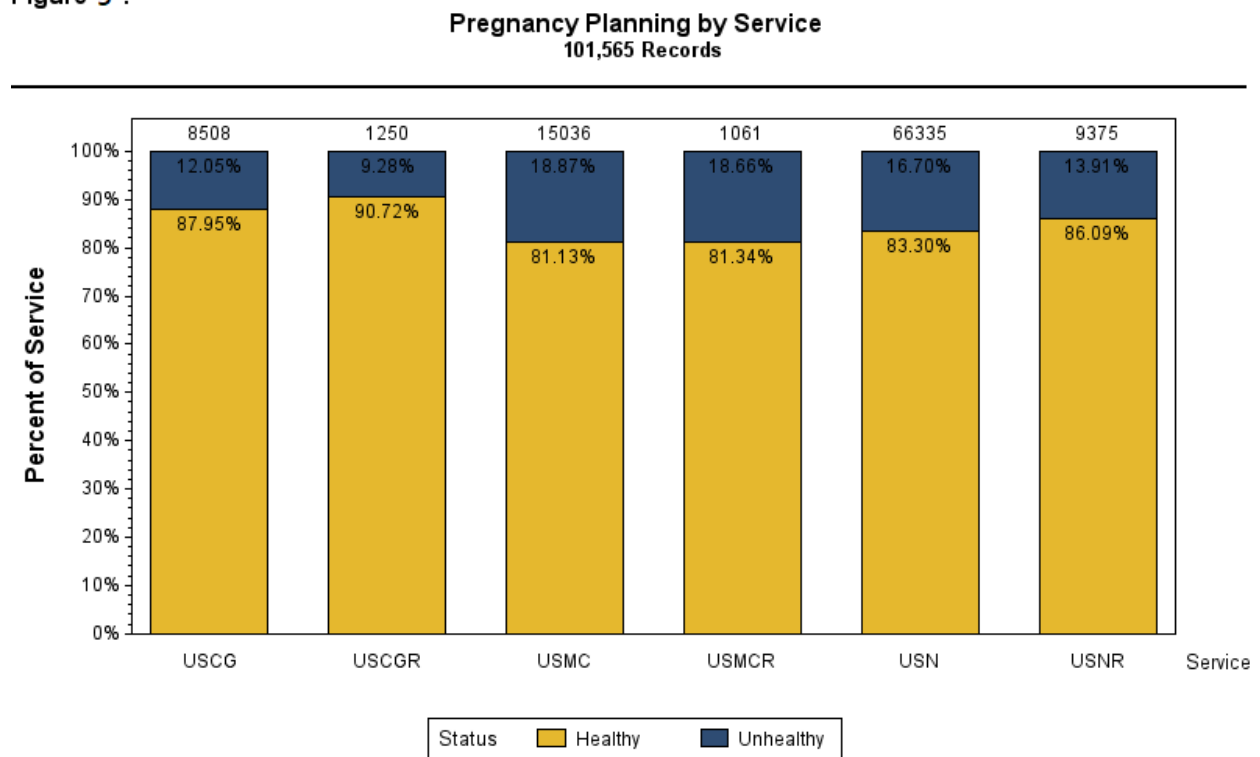
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Pregnancy Planning

Healthy behaviors related to pregnancy planning were highest for the USCGR at 90.7% and USCG at 88.0%. Healthy behaviors reported for the USN and USNR were 83.3% and 86.1%, respectively. The USMC and USMCR reported the lowest number of healthy behaviors at 81.1% and 81.3%, respectively (Figure 9).

Figure 9 :



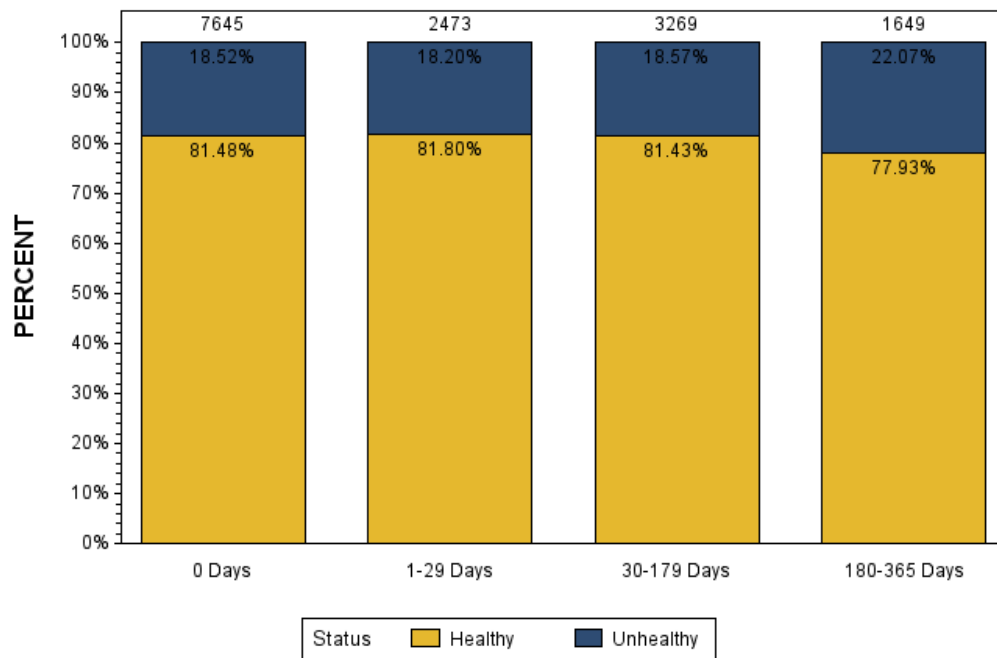
Data Source: 2018 HRA
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There was no significant change in healthy behaviors related to pregnancy planning as time away from the home station increased for USMC members (Figure 10). USMCR members saw the largest proportion of healthy pregnancy planning behaviors in those who were away from home station for 180-365 days (Figure 11).

Figure 10:

USMC Pregnancy Planning by Days Away from Home Station
 15,036 Records

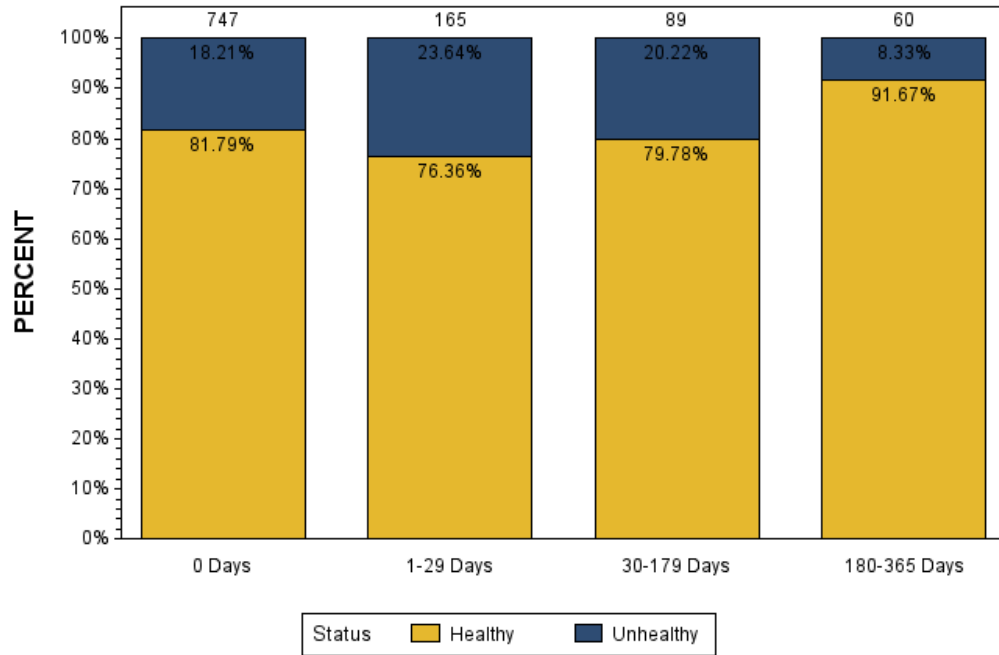


Data Source: 2018 HRA
 Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 11:

USMCR Pregnancy Planning by Days Away from Home Station
1,061 Records



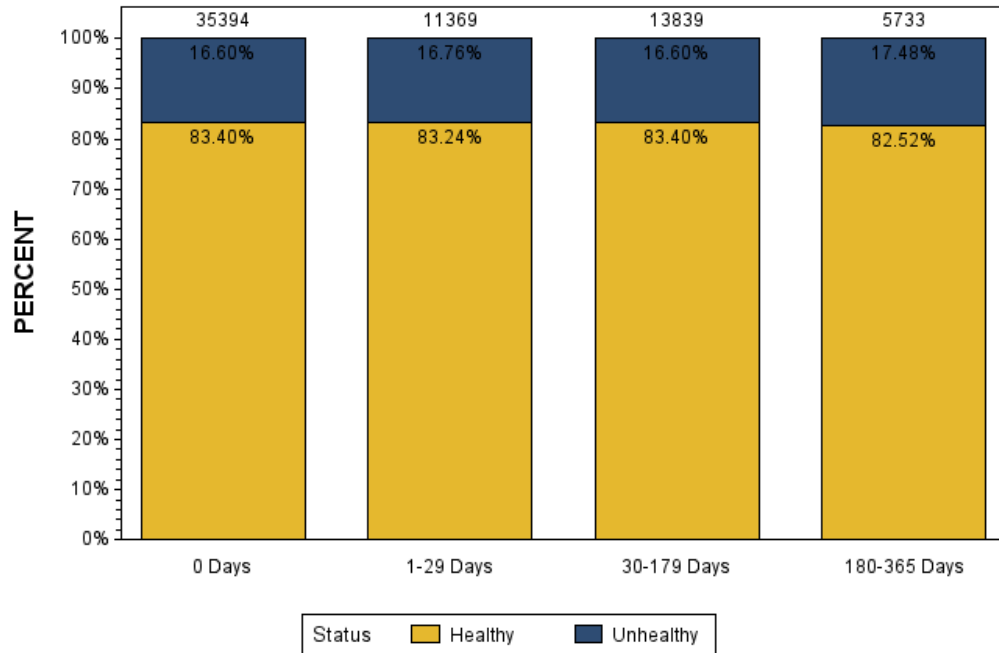
Data Source: 2018 HRA
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



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 (17.5%).

Figure 12:

USN Pregnancy Planning by Days Away from Home Station
 66,335 Records

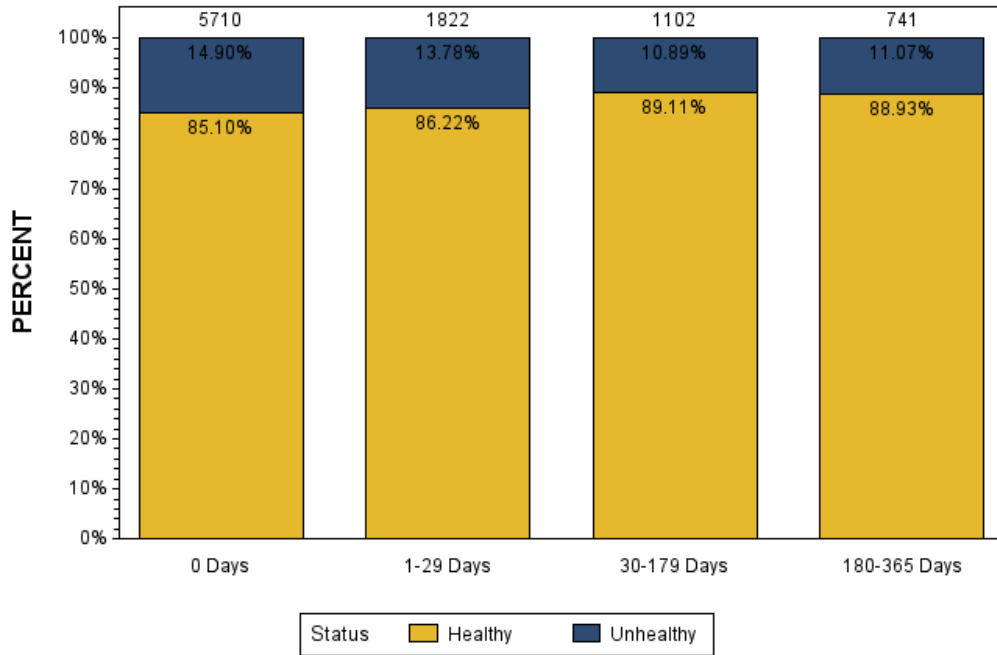


Data Source: 2018 HRA
 Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 13:

USNR Pregnancy Planning by Days Away from Home Station
9,375 Records



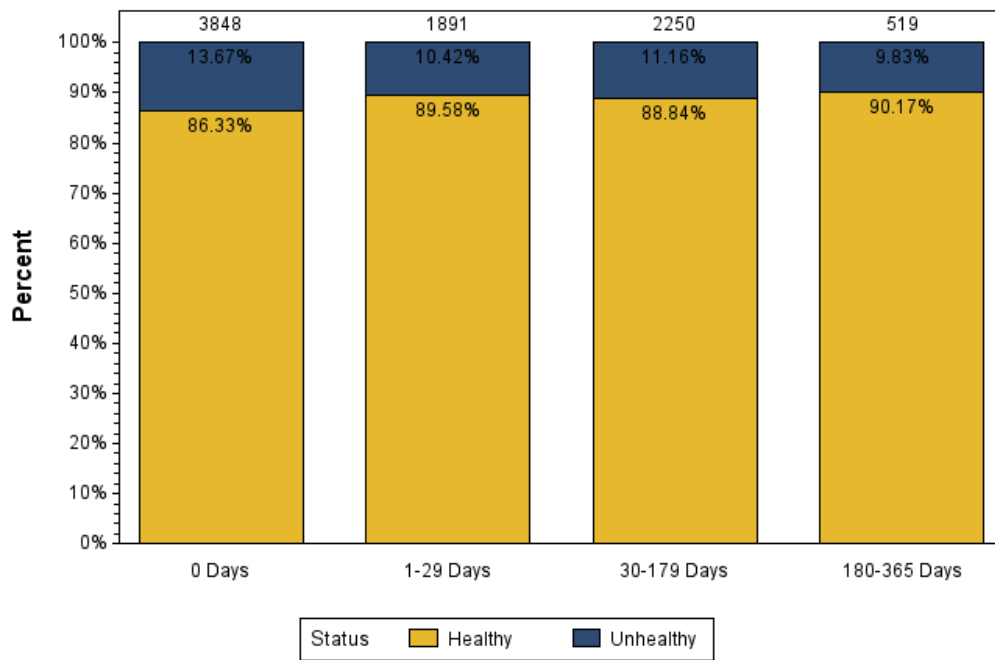
Data Source: 2018 HRA
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



For the USCG and USCGR, healthy behaviors regarding pregnancy planning remained relatively stable across time away from home station (Figures 14 and 15). USCG members who did not leave home station in 2018 had the most reported unhealthy pregnancy planning behaviors (13.7%).

Figure 14:

USCG Pregnancy Planning by Days Away from Home Station
8,508 Records

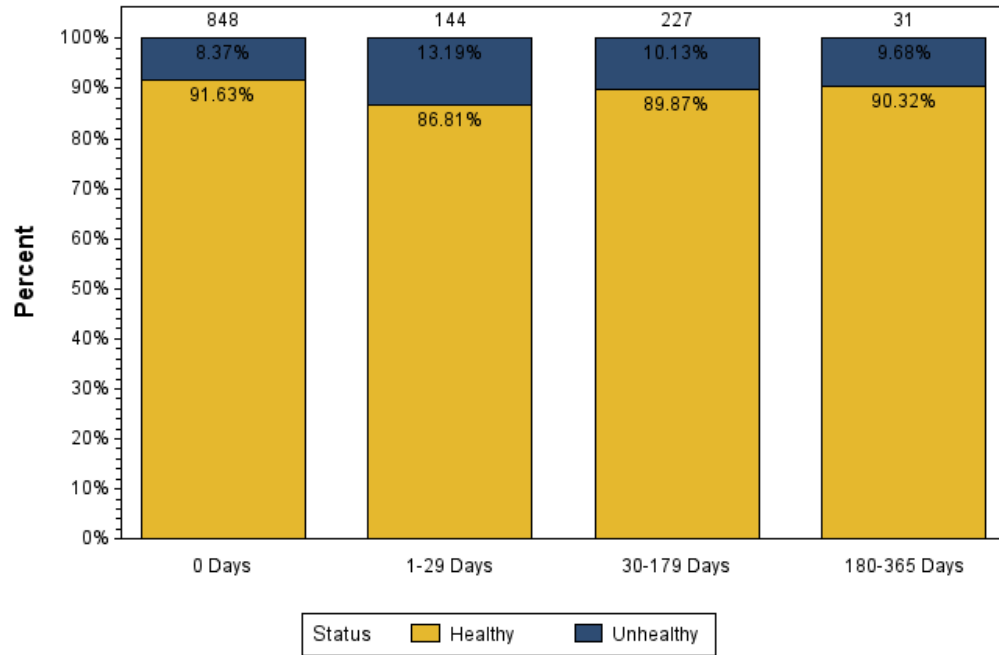


Data Source: 2018 HRA
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Figure 15:

USCGR Pregnancy Planning by Days Away from Home Station
1,250 Records



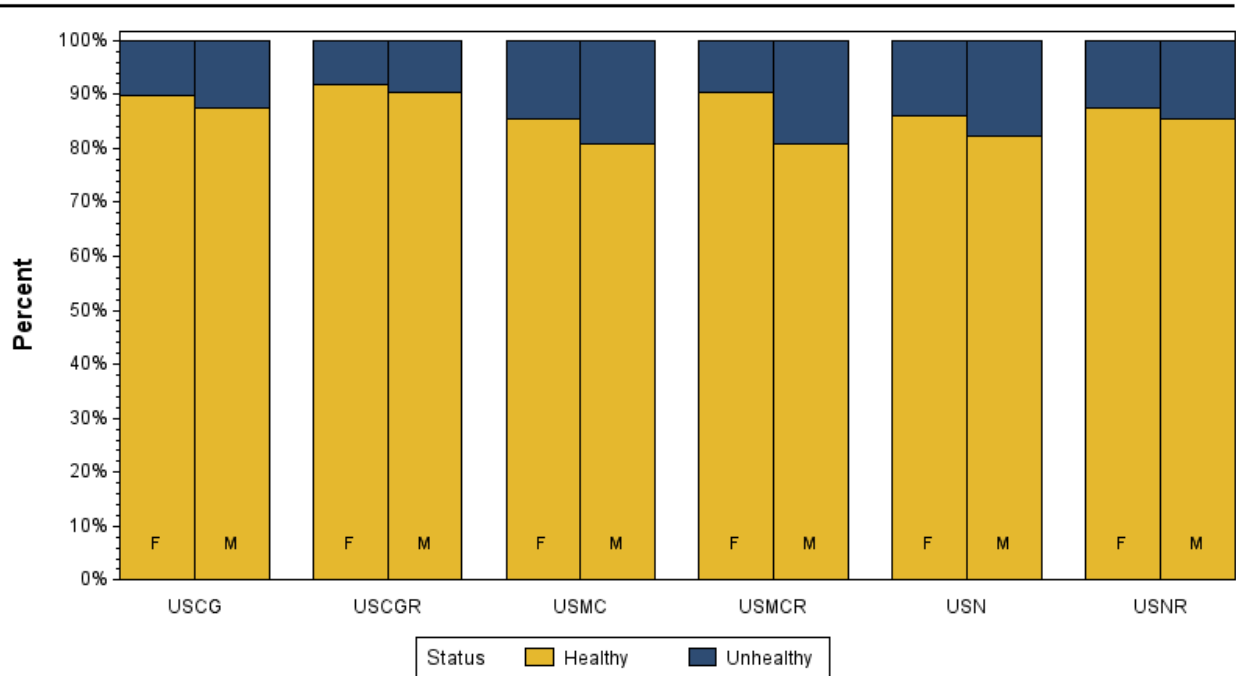
Data Source: 2018 HRA
Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



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

Figure 16:

Pregnancy Planning by Service Component and Gender
 101,565 Records



Data Source: 2018 HRA
 Prepared by the EpiData Center Department, Navy and Marine Corps Public Health Center on 15 March 2019



Table 3. Condom Use Healthy Responses by Service Component and Gender, CY 2018 HRA^a

Service	Gender	Percent	N
USCG	Female	89.9	1,119
	Male	87.6	6,364
USCGR	Female	91.9	214
	Male	90.5	920
USMC	Female	85.6	1,062
	Male	80.7	11,137
USMCR	Female	90.5	57
	Male	80.8	806
USN	Female	86.2	13,415
	Male	82.4	41,840
USNR	Female	87.6	2,014
	Male	85.6	6,057

^a Percent Change calculation [(2018 Value- 2017 Value)/ (2017 Value)]*100

Data Source: 2018 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 2017, 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. Not using 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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