

Eating Disorders in Military Members, Veterans, and Families

- Studies conducted in cadets or active duty military personnel suggest high risk of eating disorders in these groups. The percentage of female cadets at risk for eating disorders ranged from 20 to 29.6% across samples. Similarly, 33.6% of a sample of active duty females scored in the at-risk range.
 - Bartlett, B. & Mitchell, K. S. (2015). Eating disorders in military and veteran men and women: a systematic review. *Int J Eat Disord*, 48(8), 1057-1069.
 - Bodell, LP, Forney, KJ, Keel, PK, Gutierrez, PM, & Joiner, TE, Jr. (2014). Consequences of making weight: a review of eating disorder symptoms and diagnoses in the United States military. *Clin Psychol Sci Pract*, 21(4), 398-409.
- During the years 2004-2013, a total of 3,527 service members received incident diagnoses of one of the eating disorders: anorexia nervosa (AN), bulimia nervosa (BN), or ENDOS. The overall incidence rate was 2.5 cases per 10,000 person-years. Incidence rates were more than 20 times higher in women than men. Higher rates were found among the younger age groups; white, non-Hispanics; and Marines compared to their respective counterparts.
- In a 2013-2017 follow-up survey, a total of 1,788 active service members received diagnoses of AN, BN, or "other/unspecified eating disorder" (OUED). The overall incidence rate was 2.7 cases per 10,000 person-years.
 - Armed Forces Health Surveillance Center (AFHSC. (2014). Diagnoses of eating disorders among active component service members, US Armed Forces, 2004-2013. *MSMR*, 21(9), 8.
 - Williams, V. F., Stahlman, S., & Taubman, S. B. (2018). Diagnoses of eating disorders, active component service members, U.S. Armed Forces, 2013-2017. *MSMR*, 25(6), 18-25.
- A 2014 summary of female service members found that stressors specific to military accession - when coupled with existing risk factors related to age, gender, family, and life experience - often exacerbate disordered eating.
 - Johnson, WB, Davis, K, & Gonzalez, V. (2014). Military accession and disordered eating among women: clinical and policy recommendations. *Mil Med*, 179(9), 936-941.
- Across studies, the prevalence estimates for binge eating have ranged from 10% – 35%, with higher estimates (upwards of 60%) for those not meeting their service weight standards. Members may be separated from the military due to their weight, rather than receiving appropriate treatment for BED.
 - Tanofsky-Kraff, M, Bulik, CM, Marcus, MD, Striegel, RH, Wilfley, DE, Wonderlich, SA, & Hudson, JI. (2013). Binge eating disorder: the next generation of research. *Int J Eat Disord*, 46(3), 193-207.
- 21% of female adolescent dependents of military personnel met the criteria for disordered eating behaviors such as bingeing, purging, and/or restrictive eating. Overall, the rate of disordered eating in multi-service military sample was significantly higher than the comparable civilian population. Military-dependents have higher rates of binge eating and weight concerns than civilians. Military families should be considered at high risk for disordered eating and eating disorders.
 - Schvey, N. A., Sbrocco, T., Stephens, M., Bryant, E. J., Ress, R., Spieker, E. A., . . . Tanofsky-Kraff, M. (2015). Comparison of overweight and obese military-dependent and civilian adolescent girls with loss-of-control eating. *Int J Eat Disord*, 48(6), 790-794.
 - Waasdorp, CE, Caboot, JB, Robinson, CA, Abraham, A, & Adelman, WP. (2007). Screening military dependent adolescent females for disordered eating. *Mil Med* 172(9), 962-967.

- Studies on veterans of Iraq and Afghanistan diagnosed with mental health problems found they are significantly more likely to have an eating disorder than those without mental health diagnoses. Eating disorders were significantly more common in male and female veterans with depression, posttraumatic stress disorder, and alcohol and/or drug use disorders than in veterans without these mental health disorders.
 - Hoerster, K. D., Jakupcak, M., Hanson, R., McFall, M., Reiber, G., Hall, K. S., & Nelson, K. M. (2015). PTSD and depression symptoms are associated with binge eating among US Iraq and Afghanistan veterans. *Eat Behav*, 17, 115-118.
 - Maguen, S., Cohen, B., Cohen, G., Madden, E., Bertenthal, D., & Seal, K. (2012). Eating disorders and psychiatric comorbidity among Iraq and Afghanistan veterans. *Womens Health Issues*, 22(4), e403-406.
 - Slane, JD, Levine, MD, Borrero, S, Mattocks, KM, Ozier, AD, Sillicker, N, . . . Haskell, SG. (2016). Eating behaviors: prevalence, psychiatric comorbidity, and associations with Body Mass Index among male and female Iraq and Afghanistan veterans. *Mil Med*, 181(11), e1650-e1656.

- Homelessness may increase risk for eating disorders in the veteran population. A study of Iraq/Afghanistan veterans found the odds of having an eating disorder diagnosis were 59% higher among homeless veterans relative to domiciled veterans.
 - Livingston, W. S., Brignone, E., Fargo, J. D., Gundlapalli, A. V., Maguen, S., & Blais, R. K. (2018). VHA-enrolled homeless veterans are at increased risk for eating disorder diagnoses. *Mil Med*. [e-pub ahead of print]

- Studies on veterans of Iraq and Afghanistan found that eating disorders in this population are likely to be associated with military sexual trauma (MST) rather than combat trauma. Veterans with a positive screen for MST, especially male veterans, had a nearly two-fold increased likelihood of having an eating disorder diagnosis.
 - Blais, R. K., Brignone, E., Maguen, S., Carter, M. E., Fargo, J. D., & Gundlapalli, A. V. (2017). Military sexual trauma is associated with post-deployment eating disorders among Afghanistan and Iraq veterans. *Int J Eat Disord*, 50(7), 808-816.
 - Breland, J. Y., Donalson, R., Li, Y., Hebenstreit, C. L., Goldstein, L. A., & Maguen, S. (2017). Military sexual trauma is associated with eating disorders, while combat exposure is not. *Psychol Trauma*, 10(3), 276-281.

- The United States Army Body Composition Program has established standards for body fat percentages. However, a study of 20,896 basic training recruits (28% female) found that ABCP percent body fat thresholds yield BMI thresholds that are below the United States Army BMI standards, especially in females. This suggests the ABCP percent body fat standards may be too restrictive.
 - Nelson, R., Cheatham, J., Gallagher, D., Bigelman, K., & Thomas, D. M. (2018). Revisiting the United States Army body composition standards: a receiver operating characteristic analysis. *Int J Obes*. [e-pub ahead of print]

- Weight stigma is widespread in the civilian population and can contribute to depression, anxiety, and disordered eating. In a 2017 study of active duty service members, nearly half reported at least one experience of stigma within the military based on shape and/or weight. Stigma was associated with harmful thoughts and behaviors, including diet pill and laxative use, purging, and overeating.
 - Schvey, N. A., Barmine, M., Bates, D., Oldham, K., Bakalar, J. L., Spieker, E. A., . . . Sbrocco, T. (2017). Weight stigma among active duty U.S. military personnel with overweight and obesity. *Stigma Health*, 2(4), 281-291.