



U.S. Department of Defense

## Factor Rating Interpretation Guide Binge Drinking

### What is Binge Drinking?

*Binge Drinking* measures how often one consumes 4 or more drinks (for females) and 5 or more drinks (for males) on one occasion. This pattern of drinking alcohol within 2 hours brings blood alcohol concentration (BAC) to 0.08 percent or higher for typical adults.<sup>14</sup>

The following item is used to assess *Binge Drinking* on the DEOCS using a five-point response scale from *Never* to *Daily or Almost Daily*:

- How often do you have four or more drinks (if you are a woman) or five or more drinks (if you are a man) on one occasion?

### Why is it important?

Research has consistently shown the detrimental impact that alcohol misuse can have on an individual's work and personal life. More specifically, higher incidences of alcohol misuse and abuse among military members has been identified as a risk factor for sexual assault and sexual harassment victimization and perpetration as well as suicidal ideation.<sup>1,2,3,4,5</sup> The DoD's gender relations surveys of military personnel consistently demonstrate that approximately half or more of sexual assaults involving Service member and Academy student victims, including both male and female victims, involve alcohol at the time of the assault.<sup>6,7,8</sup> More specifically, the 2018 Workplace and Gender Relations (WGR) survey of active duty members identified alcohol use, defined as the frequency that men and women drink to the point of blacking out, as an important risk factor associated with an installation or ship's estimated sexual assault and sexual harassment rates.

Several studies have also linked alcohol misuse with suicidal ideation.<sup>9,10,11</sup> Specifically, a 2018 study of U.S. active duty soldiers found that substance abuse, including alcohol misuse, was linked to an increase in suicidal behaviors and less mental health resiliency.<sup>12</sup> Additionally, the 2018 North Atlantic Treaty Organization (NATO) report<sup>13</sup> demonstrated that military members' use of alcohol represents a significant risk for both suicidal behavior and ideation.

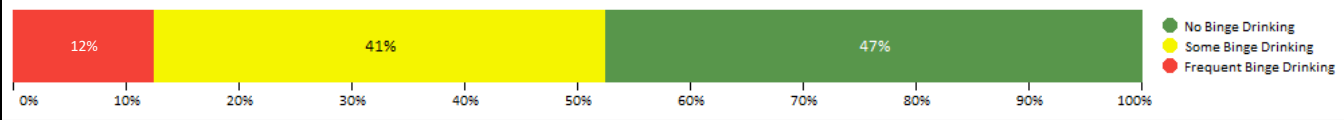
For more information on how to review your DEOCS results with these key outcomes in mind, please see the "Strategic Target Outcome Guide" in the Quick Links menu of the DEOCS dashboard.

### How do I read my factor ratings?

The DEOCS dashboard displays results for *Binge Drinking* in a stacked bar graph showing ratings for **Frequent Binge Drinking**, **Some Binge Drinking**, and **No Binge Drinking**. Because *Binge Drinking* is a factor measured by a single question, you should interpret results as "X% of participants." An example is shown below:

## Binge Drinking

Binge drinking measures how often one consumes 4 or more drinks (for females) and 5 or more drinks (for males) on one occasion. This pattern of drinking alcohol within 2 hours brings blood alcohol concentration (BAC) to 0.08 percent or higher for typical adults. Frequent binge drinking is linked to a higher likelihood of sexual harassment, sexual assault, and suicide.



**Unfavorable rating: 12% of participants** reported frequent binge drinking.



**Middle rating: 41% of participants** reported some binge drinking.

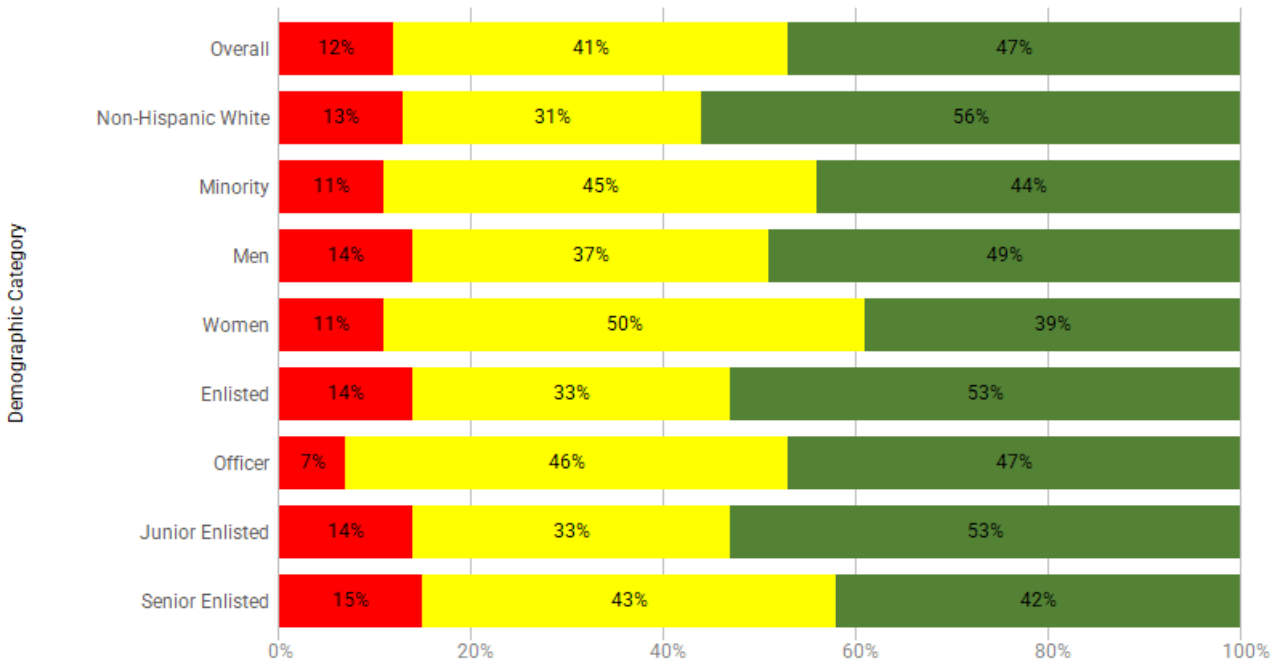


**Favorable rating: 47% of participants** reported no binge drinking.

For the graph showing results by demographic categories, the percentages represent the percentage of participants from each demographic category who reported unfavorable, midpoint, or favorable responses.

## Binge Drinking Ratings by Demographic Category

This graph displays Binge Drinking ratings by demographic category. No data are displayed if fewer than five people from a demographic category responded to this set of questions.



The first bar will always show the overall results and will be the same percentages that are shown in the stacked bar graph. The next bars will represent various demographic categories for your organization. These results can help determine whether some groups of people in your organization have particularly high or low perceptions of climate factors. In addition, you may have different categories than in the example above. If your organization did not have any participants from a particular demographic category or had fewer than five participants from a particular category, you would not see those categories in your graph. For more information on how the demographic groups are created, please see the “Data Overview” in the Quick Links menu of the DEOCS dashboard.

In this example, the unfavorable ratings (marked in red) can be interpreted as:

- 13% of non-Hispanic White participants reported frequent binge drinking, while 11% of minority participants reported frequent binge drinking;
- 14% of male participants reported frequent binge drinking, while 11% of female participants reported frequent binge drinking;
- 14% of enlisted participants reported frequent binge drinking, while 7% of officers reported frequent binge drinking;
- 14% of junior enlisted participants reported frequent binge drinking, while 15% of senior enlisted participants reported frequent binge drinking.


The middle ratings (marked in yellow) can be interpreted as:


- 31% of non-Hispanic White participants reported some binge drinking, while 45% of minority participants reported some binge drinking;
- 37% of male participants reported some binge drinking, while 50% of female participants reported some binge drinking;
- 33% of enlisted participants reported some binge drinking, while 46% of officers reported some binge drinking;
- 33% of junior enlisted participants reported some binge drinking, while 43% of senior enlisted participants reported some binge drinking.

The favorable ratings (marked in green) can be interpreted as:

- 56% of non-Hispanic White participants reported no binge drinking, while 44% of minority participants reported no binge drinking;
- 49% of male participants reported no binge drinking, while 39% of female participants reported no binge drinking;
- 53% of enlisted participants reported no binge drinking, while 47% of officers reported no binge drinking;
- 53% of junior enlisted participants reported no binge drinking, while 42% of senior enlisted participants reported no binge drinking.

You may also see trends over time for your *Binge Drinking* unfavorable rating if there are previous 5.0 surveys with the same unit identification code (UIC) and the same commander/leader.

When applicable, trends over time are available in the dashboard by clicking on this icon: . They also appear in the PDF reports as a table. Even if your report includes trends over time, the results may not be comparable in certain circumstances. It is important to understand differences in roster size and roster composition at different time points as these items may impact comparability of trend results. Take a close look at the number of participants registered, surveys returned, and the response rate for any surveys for which trends are available to report; use caution when comparing trends over time if there are big differences in these numbers between surveys. Other things, such as deployments or changes in policy, may also make trends less comparable. For more information on factor rating trends, please see the “Data Overview” in the Quick Links menu of the DEOCS dashboard.

Finally, you may see an alert  for your *Binge Drinking* ratings. This means that your unit’s/organization’s unfavorable rating for *Binge Drinking* is **very high** compared to the other unfavorable ratings for this factor in your Service component. When applicable, this alert icon appears in the dashboard inside the “Risk Factors – Unfavorable Ratings” heading; click on the icon to see if *Binge Drinking* is listed in the table. The alert icon may also appear in the *Binge Drinking* section of the PDF reports. To identify whether your *Binge Drinking* ratings receive an alert, cut-off scores were created by rank-ordering all unfavorable ratings for this factor

within a Service component. If your unfavorable rating for *Binge Drinking* is above your Service component's cut-off score, this icon will appear in your report. There are unique cut-off scores for each factor within each Service component. Because of this, you may notice that some of the factors for which you have an alert have very different ratings. For more information on how these alerts are created, please see the "Data Overview" in the Quick Links menu of the DEOCS dashboard.

## How are my unit's/organization's ratings created?

*Binge Drinking* rating is created from the responses to a single question on a five-point *Never to Daily or Almost Daily* scale, as shown in the example below.

Binge Drinking Question	Never	Less than Monthly	Monthly	Weekly	Daily or Almost Daily	Total
How often do you have four or more drinks (if you are a woman) or five or more drinks (if you are a man) on one occasion?	47% (94)	29% (57)	13% (25)	9% (17)	4% (7)	100% (200)
	No Binge Drinking	Some Binge Drinking	Frequent Binge Drinking		Total responses 200	
	94 / 200 = <b>47%</b>	(57+25) / 200 = <b>41%</b>	(17+7) / 200 = <b>12%</b>			

The table above displays the percentage of responses (and number of responses in parentheses) for the question across the five responses options (*Never*, *Less than Monthly*, *Monthly*, *Weekly*, and *Daily or Almost Daily*). For example, 94 participants selected *Never*; this represents 47% of participants that responded to this question ( $94 / 200 = .47$  or 47%).



Note that percentages are calculated out of the total number of participants responding to that question and not the total number of participants taking the survey. Participants can skip questions, so you may notice that total responses to questions vary. In addition, factor ratings may not always add to 100% due to rounding.

- The **unfavorable** rating, named **Frequent Binge Drinking**, is a combination of all responses of *Daily or Almost Daily* and *Weekly* from the question in the *Binge Drinking* scale.
  - For this example, 17 people answered *Weekly* and 7 people answered *Daily or Almost Daily*. Therefore, 24 responses were either *Weekly* or *Daily or Almost Daily* to this question ( $17+7 = 24$ ).
  - To produce an overall score for **Frequent Binge Drinking** representing the unfavorable responses to this question, the total number of responses (24) is divided by the total number of people who responded to the question (200). **This produces an unfavorable rating of 12% ( $24 / 200 = .1200$ ).**
- The **Some Binge Drinking** rating is a combination of all responses of *Monthly* and *Less Than Monthly*.
  - For this example, there are 82 *Less Than Monthly* or *Monthly* responses to the question. This total is divided by the total number of responses to the question ( $82 / 200 = .4100$ ). **This rounds to a Some Binge Drinking rating of 41%.**

- To create the **favorable** rating, the same process above is followed, except the score is created from only one response option – *Never*.
  - For this example, there are 94 *Never* responses. This is divided by the total number of responses to the question ( $94 / 200 = .4700$ ). **This rounds to a No Binge Drinking rating of 47%.**

## How do I know if my factor ratings are good or bad?

The DEOCS team is working on a data-driven approach that will help you understand what a rating means for an organization’s likelihood of positive or negative outcomes. In the meantime, we recommend using the following strategies to help put your *Binge Drinking* ratings into context and understand whether actions should be taken to address high unfavorable ratings:

1. If applicable, review the information in the alert icon  to see if your *Binge Drinking* ratings are called out. This icon would appear in the dashboard and in the PDF reports if your unit’s/organization’s unfavorable rating for *Binge Drinking* is very high compared to others in your same Service component. You should consider taking action to lower this rating.
2. Examine the bar graph showing the overall unfavorable rating for *Binge Drinking* and the unfavorable ratings by various demographic groups. Look at each group’s rating in relation to the overall unit/organization rating. If any groups have particularly high unfavorable ratings for Binge Drinking, this could help you plan actions to decrease your unfavorable rating in specific areas of your organization.
3. If applicable, review your *Binge Drinking* unfavorable rating trends over time. You can view these trends by clicking on this icon  in the dashboard; they also appear as a table in the PDF reports. Take note if your ratings are going up over time. You may need to take action to reverse this trend.

## Factor Improvement Tools for Binge Drinking

The following resources may be useful as you make plans or take action to improve your *Binge Drinking* ratings. Each resource listing contains a description, a link, and the relevant audience. Some resources may be more appropriate for the commander/leader, unit/organization personnel, survey administrators, or the Integrated Primary Prevention Workforce (IPPW); the relevant audience advises which group may benefit from use of the recommended resource.

- **Alcohol Use and Preventing Alcohol-Related Problems Among Adults in the Military.** Article on problematic drinking among young adults in the Military.  
<https://pubs.niaaa.nih.gov/publications/arh284/252-257.htm>  
Audience: Commander/Leader, unit personnel, survey admin, IPPW
- **Binge Drinking Among US Active Duty Military Personnel.** Article discussing excessive alcohol consumption by military personnel.  
[https://www.researchgate.net/publication/24006841\\_Binge\\_Drinking\\_Among\\_US\\_Active-Duty\\_Military\\_Personnel](https://www.researchgate.net/publication/24006841_Binge_Drinking_Among_US_Active-Duty_Military_Personnel)  
Audience: Commander/Leader, unit personnel, survey admin, IPPW



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