

HCSDB Issue Brief

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Why Military Beneficiaries Vape and the Perceived Risk of Vaping

The popularity of e-cigarette use, or vaping, has increased over the years (McKeganey et al. 2017; Russell et al. 2020). Consumers cite several advantages to vaping over smoking, such as the lack of smoke or lasting odor, which makes it possible to vape indoors; a variety of flavors; and a cheaper price (McKeganey et al. 2017). However, as the popularity of vaping grows, injuries and illnesses related to e-cigarettes have also gained more attention. As of February 2020, 2,807 cases of or deaths from e-cigarette use-associated lung injury (EVALI) have been reported to the Centers for Disease Control and Prevention (CDC 2020). But despite the well-publicized risk of serious illness, many people still believe that vaping is less harmful than smoking and often use vaping as a means to quit smoking traditional cigarettes (Russell et al. 2020; Brose et al. 2015).

In the military, e-cigarette use has increased, even as traditional smoking has declined. According to a 2015 Health-Related Behaviors Survey from the U.S. Department of Defense, service members have been reducing their use of traditional cigarettes since 2011, but 36 percent of service members have tried e-cigarettes, and 11 percent define themselves as daily users (Meadows et al. 2018). Younger service members (18 to 24 years old) are more likely than their older peers to use both e-cigarettes and traditional tobacco products (Clusen et al. 2018).

Knowing why people vape and how they view the risks of vaping and cigarette use can be helpful for predicting future behaviors. Research shows that perception of risk is an important indicator of whether people will start to smoke, and for adolescents, it's an indicator of whether they will vape (Devitt 2019; Huang et al. 2019; Russell et al. 2020). Measuring perceived risk could help the Defense Health Agency (DHA) predict the future smoking behavior of current and former service members and their families.

This issue brief presents findings from the Health Care Survey of Department of Defense Beneficiaries (2020, third quarter) on why military beneficiaries vape, how

This issue brief presents findings from the HCSDB on why military beneficiaries vape, how they view the risks of vaping and smoking, and whether they plan to vape in the future.

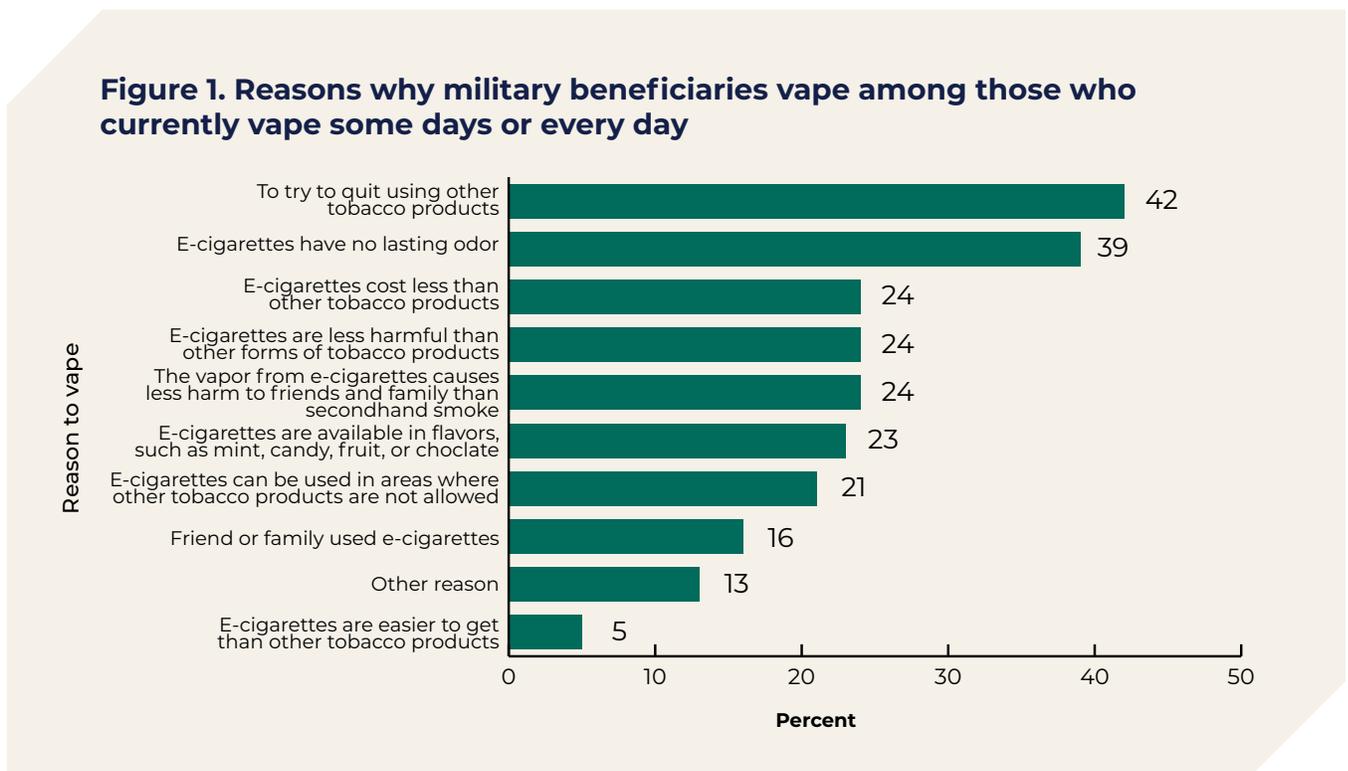
- Only 3 percent of military beneficiaries said that they vaped or used e-cigarettes some days or every day.
- The most popular reason for vaping among military beneficiaries is to try to quit smoking (42 percent).
- Most beneficiaries perceived smoking and vaping to be great risks to one's health. However, 87 percent of beneficiaries said smoking is a great risk, whereas only 68 percent said the same for vaping. Three times as many beneficiaries were unsure about the risk of vaping than were unsure about the risk of smoking.
- Three percent of beneficiaries said they plan to vape within the next year. Among them, 25 percent will be new vapers. Those who viewed vaping as a slight risk to one's health were more likely to indicate they would vape in the next year, compared to those who saw vaping as a moderate or great risk, or were unsure about the risk.

they view the risks of vaping and smoking, and whether they plan to vape in the future. Understanding how military beneficiaries view the risks of vaping may help DHA and public health officials tailor their campaigns to curb the use of e-cigarettes.

Why military beneficiaries are vaping

Only 3 percent of military beneficiaries said that they vaped or used e-cigarettes some days or every day. Over

half of beneficiaries who had tried vaping, even just once in their life, first tried it before they were age 25; 42 percent tried vaping when they were ages 18 to 24, and 10 percent tried it when they were age 17 or younger (not shown). Among those who vaped, the most common reason was as a mechanism to quit smoking (42 percent), followed by the lack of lasting odor (39 percent) (Figure 1). Almost one-quarter (24 percent) believed that e-cigarettes cost less than other tobacco products, that the vapor is less harmful to friends and family than secondhand smoke or that e-cigarettes are less harmful than other tobacco products.



Note: Percentages do not sum to 100 because respondents could select multiple reasons for vaping.

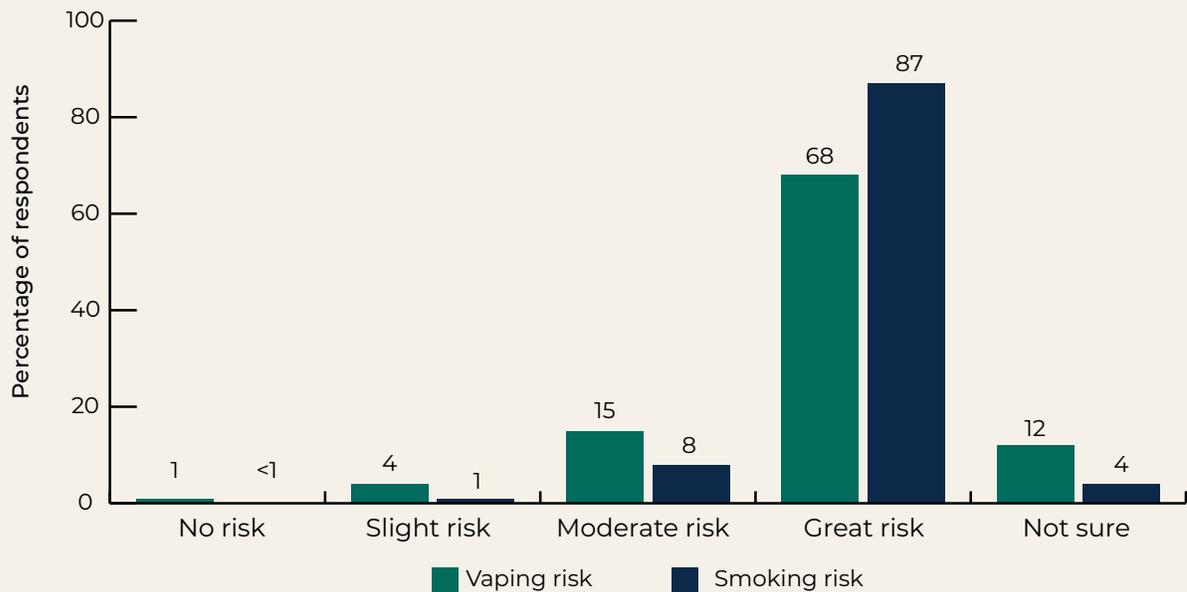
Perceived risk of vaping and smoking

Overall, most beneficiaries, regardless of whether they vape, said that smoking and vaping pose great health risks. However, 87 percent of beneficiaries said that smoking poses a great risk to one’s health, whereas only 68 percent said the same for vaping (Figure 2). In addition, three times as many beneficiaries were

unsure about the risk of vaping (12 percent) than were unsure about the risk of smoking (4 percent).

Beneficiaries tended to have similar views on the risks of smoking versus vaping. Seventy-five percent of beneficiaries who said that vaping poses a great risk also said that smoking poses a great risk, and 86 percent of beneficiaries who said that there is no risk to vaping also said the same about smoking (not shown).

Figure 2. Perceived risk of vaping and smoking among all respondents

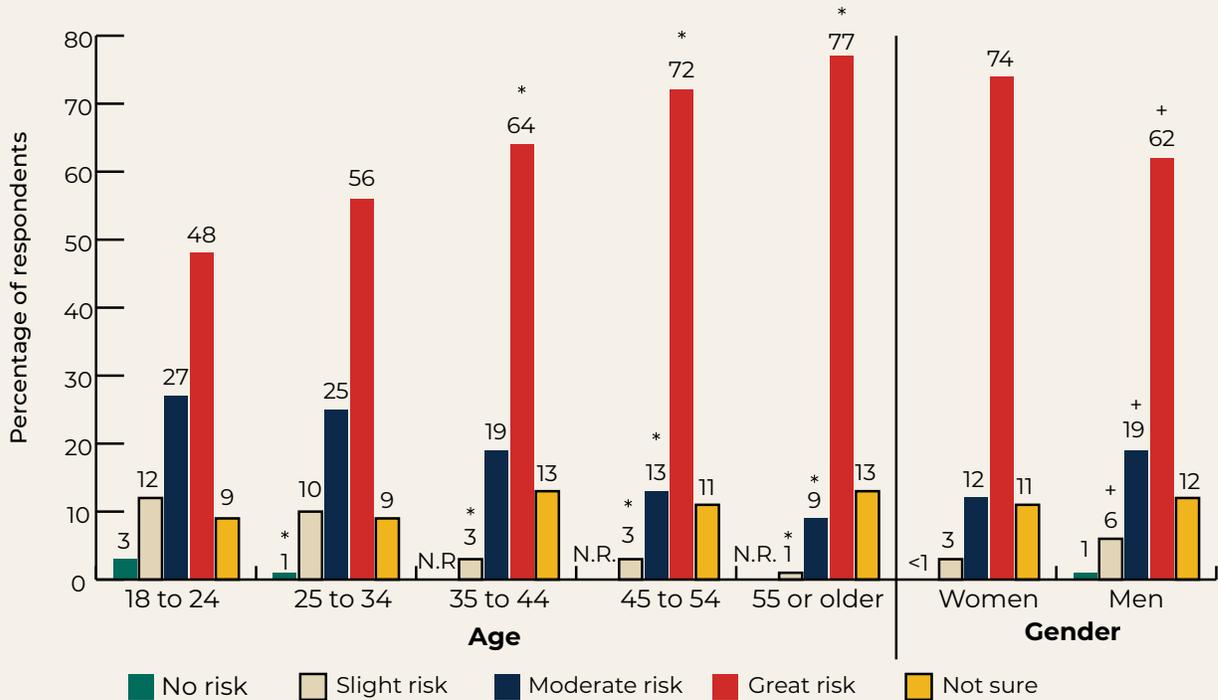


The perceived risk of vaping varied across age, with younger beneficiaries seeing vaping as less risky than older beneficiaries did. Fewer than half (48 percent) of beneficiaries ages 18 to 24 said that vaping poses great risk, compared with 64 percent of beneficiaries ages 35 to 44, 72 percent of beneficiaries ages 45 to 54, and 77 percent of beneficiaries ages 55 and older (Figure 3). Women were more likely than men to believe that vaping is a great risk to their health (74 percent versus 62 percent). The percentage of

beneficiaries who were not sure of the risks of vaping was steady across age and gender—from 9 to 13 percent (Figure 3).

Beneficiaries who vaped because they were trying to quit smoking saw vaping as less of a risk than smoking. Only 19 percent of beneficiaries who were vaping to quit smoking perceived vaping as a great risk, whereas 80 percent of them saw smoking as a great risk (not shown).

Figure 3. Perceived risk of vaping among all respondents, by age and gender



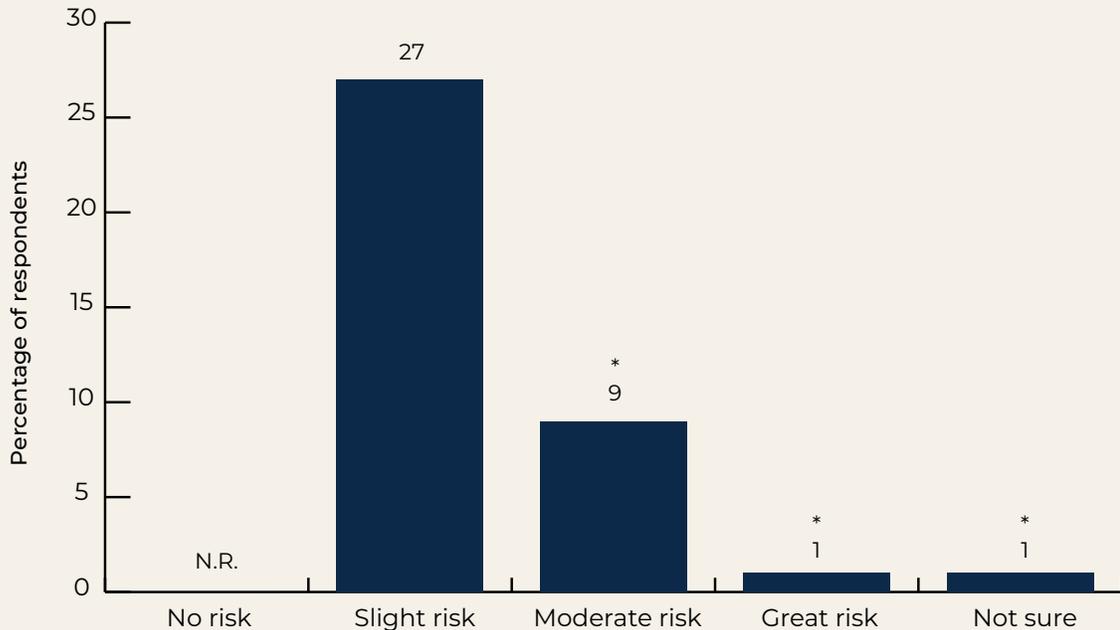
N.R. = Not reported because of the small number of respondents.
 *Significantly different from beneficiaries ages 18 to 24 ($p < 0.05$).
 +Significantly different from women ($p < 0.05$).

Plans to vape in the future

Three percent of beneficiaries said that they plan to vape within the next year; among them, 25 percent will be new vapers, meaning that they said they currently do not vape every day or some days (not shown). Beneficiaries who saw vaping as a slight health risk

were more likely to indicate that they would vape in the next year (27 percent) compared with those who saw vaping as a moderate risk (9 percent) or a great risk (1 percent) or were not sure about the risk (1 percent; Figure 4). Among those who said that they plan to vape in the next year, almost half (47 percent) were ages 18 to 24, and 68 percent were men (not shown).

Figure 4. Respondents who plan to vape within the next year, by perceived risk of vaping



*Significantly different from slight risk ($p < 0.05$).
 N.R. = Not reported because of the small number of respondents.

Discussion

Our results indicate that vaping is not popular among military beneficiaries; only 3 percent currently vape. And vaping is less popular among military beneficiaries than among American civilians; 8 percent of civilians reported vaping in the past week (Hrynowski 2019).

Although most people saw vaping as a great health risk, they were less certain about the risks of vaping compared with smoking. About three times as many beneficiaries were unsure about the risk of vaping than about the risk of smoking. Younger beneficiaries and men were less likely than older beneficiaries and women, respectively, to see vaping as a great health risk. And although few beneficiaries intended to vape in the next year, one-quarter of those who did were people who did not vape at the time of the survey. Those who saw vaping as only slightly risky were more likely to indicate plans to vape in the future.

The most common reason that beneficiaries cited for vaping was to quit using other tobacco products, which is consistent with other research (Brose et al. 2015; Bullen et al. 2013; Manzoli et al. 2015; Russell et al. 2020; Vickerman et al. 2017). However, the Food and Drug Administration (FDA; 2019) has not approved e-cigarettes as a method to help people quit smoking. And a study from CDC (2015) showed that many adults were using e-cigarettes in an attempt to quit smoking, but most of them did not stop smoking cigarettes and instead continued to use both products. Beneficiaries who were vaping as a way to quit smoking saw vaping as less risky, but research on the harmful effects of vaping is still evolving, and the recent outbreak of EVALI cases and deaths undermines the case for using e-cigarettes as a safe method of smoking cessation.

To promote a healthier military community, DHA should encourage health care providers and military leaders to keep educating service members on the risks of vaping and e-cigarettes. For members who are using

e-cigarettes as a way to quit smoking, providers and military leaders should inform them of other, FDA-approved methods for smoking cessation. In addition, creating a service-wide culture that discourages vaping could be influential for younger service members—and more effective than relying on health care providers alone—in informing beneficiaries of the risks of vaping.

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Source

Q3 FY 2020 Health Care Survey of Department of Defense Beneficiaries. N = 10,549. The response rate is 10.5 percent. The survey was fielded from April 1, 2020, to June 30, 2020.