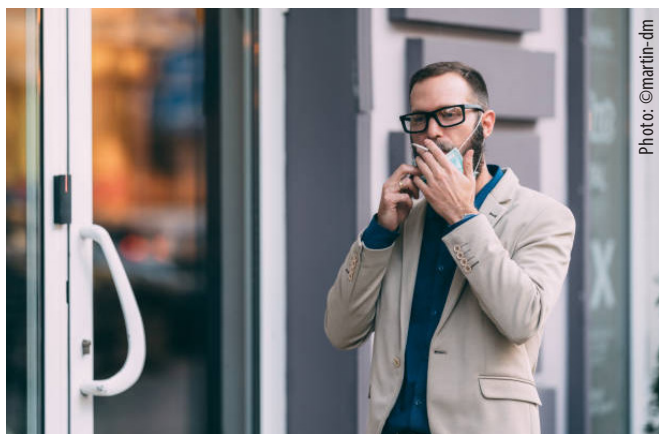


Million Veteran Program Data Point to Genetic Profile of Smokers



Using MVP data on 209,000 Veterans, researchers pinpointed genetic locations linked to smoking and addictive behavior. The results could help researchers find new treatments to help Veterans quit smoking.



Tobacco smoking is a leading cause of death and disability in the world. About 3 in 10 U.S. military Veterans used some form of tobacco product between 2010 and 2015, according to the Centers for Disease Control and Prevention.

Genetic variation inherited from parents contributes to people's risk of becoming smokers. In the past two decades, studies have sought to identify risk variants in the human genome for smoking and related traits.

Past research identified two loci (locations in the genome) related to smoking risk. Researchers believe that many other risk loci remain to be discovered. As it does for many other health conditions, MVP provides a powerful platform to identify new genetic variants responsible for smoking behavior.

A team of researchers led by Dr. Amy Justice from the VA Connecticut Healthcare System and Dr. Henry Kranzler from the Michael J. Crescenz VA Medical Center in Philadelphia have begun to identify some of these new genetic variants. They conducted a genome-wide association study of smoking in 209,000 MVP enrollees with European ancestry.

The team identified 11 genomic loci, including one already known to be linked to smoking. Ten of the 11 loci that the team found were not previously known to influence smoking. They include a variant in a gene that has been previously linked to eating disorders. Importantly, the team replicated the findings on four of these new loci in a follow-up analysis using 336,000 genetic samples from the UK Biobank.

The results offer new insights into how genes affect cigarette smoking in U.S. Veterans of European descent, and will help inform future research aimed at discovering risk genes for smoking in other ethnic populations. Ultimately, the research is helping to lay the foundation for new and better ways to help people quit smoking.

For more information on the Million Veteran Program, visit mvp.va.gov. To learn about VA resources to help Veterans quit smoking, please see the other side of this sheet.

VETERANS, TOBACCO, AND HEALTH

There is a long history of smoking and other tobacco use in the military. Many Veterans used tobacco while they served, particularly during deployment. Seven out of every 10 Veterans who smoke would like to quit — for both the physical benefits and their mental health. A majority of them are successful.

If you're one of those Veterans, or if the Veteran in your life is trying to quit, VA offers resources for making a quit plan and sticking to it.

VA's approach centers on the proven combination of medication and counseling. We offer the following resources to help you on your journey:

- **Medications:** Using FDA-approved medications — such as nicotine replacement therapy, bupropion, and varenicline — while you're quitting can help you manage nicotine withdrawal symptoms and cope with the urge to smoke. Your VA provider can guide you through the available options to help you decide which is likely to work best for you.
- **Counseling:** Combining smoking cessation medications with counseling offers you the best chance of quitting — and staying tobacco-free. VA offers tobacco cessation counseling, in person or over the phone, to talk about your tobacco use, ways to get tobacco out of your life, coping with triggers, and changing your lifestyle to remain tobacco-free.

To learn more, contact your VA health care provider.

- **Smoking Quitline:** Tobacco quitlines can double your chances of quitting, compared with getting no support at all. Call to make your quit plan, get individual counseling, and develop strategies for preventing relapse. Quitline counselors offer continued support through follow-up calls, and counseling is available in both English and Spanish. Call 1-855-QUIT-VET (1-855-784-8838) between 9 a.m. and 9 p.m. ET, Monday through Friday.
- **SmokefreeVET:** Need a little encouragement while you're quitting tobacco or smokeless tobacco? The free SmokefreeVET text message program will provide you with daily advice and support. Text VET to 47848 or visit smokefree.gov/VET to sign up. For messages in Spanish, text VETesp to 47848 or visit smokefree.gov/VETesp.
- **Stay Quit Coach:** This [mobile app](#) was designed to help you quit smoking. Use it to develop a customized plan, taking into account your personal reasons for quitting. It will provide information, motivational messages, interactive tools for dealing with urges, and support to help you stay smoke-free.

Adapted from www.mentalhealth.va.gov/quit-tobacco/index.asp. Visit this website for live links to the resources discussed above.

Visit our website to stay up to date on the latest MVP news and ongoing studies.



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