



# MVP Research

The Million Veteran Program (MVP), VA's largest research effort, is inviting more than 1 million Veterans to help us understand how genes, lifestyle, military experiences, and exposures affect your health and wellness.



**Sandrene,**  
Army Veteran

**Joe,**  
Army & Navy Veteran



## We're studying health conditions that matter to Veterans:

- Alzheimer's Disease and dementia
- Cancers
- Cardiovascular disease
- Cholesterol
- COVID-19
- Diabetes
- Gulf War Illness
- Kidney Disease
- Macular Degeneration
- Mental Health
- Osteoarthritis
- Parkinson's Disease
- Posttraumatic Stress Disorder
- Substance Use Disorders
- Suicide Risk
- Traumatic Brain Injury (TBI)
- Tinnitus
- And more



Veterans can sign up for the Million Veteran Program

at [mvp.va.gov](https://mvp.va.gov) or at a participating VA location. You don't have to receive your care at VA to join.



## Posttraumatic Stress Disorder (PTSD)

- We found genes related to re-experiencing traumatic memories, a common symptom of PTSD. We also discovered parts of people's genes related to PTSD that are different between people of African and European ancestry.
- We learned that the likelihood of experiencing PTSD can be inherited, meaning PTSD is a disease that can be passed down from one generation to the next.



## Substance Use

- We found genes linked to opioid use disorder (OUD) that are related to other substance use and psychiatric disorders. These genes may impact the brain more than the rest of the body. This means OUD could be a brain disease, which may reduce stigma and help find new ways to address the opioid epidemic.
- We found new parts of the gene linked to alcohol use disorder, which helps us understand the biology of alcohol use.



## Brain Health

- We found genes linked to higher and lower risk of Alzheimer's Disease and related dementia in people of African ancestry. This may help people from long understudied communities get better, more personalized care.
- We advanced understanding of the relationship between PTSD, Traumatic Brain Injury (TBI), genetics, and dementia. We confirmed that PTSD and TBI are major risk factors for dementia.
- We studied the well-being of Veterans screened for deployment-related TBI. We found that some Veterans may still benefit from TBI treatment even if they do not have a formal diagnosis.



## Heart Health

- We discovered three gene mutations that protect against different types of heart disease and type 2 diabetes. Veterans in MVP with these mutations had better cholesterol and triglyceride levels. Because of this finding, drugs for other conditions may be useful in treating cardiovascular disease and diabetes.



## Cancer

- We learned that a genetic screening test can accurately predict breast cancer risk in women Veterans.
- We discovered that another genetic screening test can help predict prostate cancer in male Veterans from many different racial and ethnic backgrounds.
- We found genes related to head and neck cancers that are different based on ethnicity.

**This research may lead to genetic tests to determine your risk of certain cancers and personalized screenings based on your risk.**



## Nutrition

Thanks to Veterans in our program, we have the largest database on nutrition in the world. So far, we've discovered:



- Nuts—but not peanut butter—can lower your risk of death from heart disease



- Five or more cups of white potatoes each week increases your risk for coronary artery disease



- High levels of sodium, like table salt, and low levels of potassium increases your risk of heart disease



- Any kind of yogurt is good for your heart health



- A diet of mostly fruit, vegetables, and other plants like whole grains, nuts, legumes, vegetable oils, and tea/coffee may help you live a longer, healthier life



## Suicide Prevention

We found ways to better predict suicide attempts and improve suicide prevention interventions. For example, we've learned:

- Many Veterans who report a suicide attempt also experience severe sleep problems like insomnia.
- Veterans who attempted suicide had a harder time absorbing oxytocin, a natural hormone that helps us with feelings of bonding and trust.

**Suicide prevention is VA's number one priority. If you or someone you know is in crisis, you are not alone. Dial 988 and press 1.**



## Turning research into everyday health care

- New, targeted treatments for chronic kidney disease are being developed based on our research. This shows **the power of genetic research to transform patient care.**
- We're researching how genes cause people to respond to different medications, including medications for blood clots and diabetes.
- We're also studying how genes impact the success of knee and hip replacement surgeries.

**Our discoveries will inform personalized care based on you and your genes.**



## Your privacy is at the core of our mission

We follow all federal regulations to keep your data and information secure. One way we do this is by removing information like your name, date of birth, and social security number from your data, so our researchers do not know your data belongs to you.

It's always your choice if you want to participate in research. You can stop at any time. Your participation won't affect your eligibility for, or access to, VA health care or benefits.



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