MILLION VETERAN PROGRAM

What is the Million Veteran Program?

With more than 775,000 Veteran partners as of August 2019, the Million Veteran Program is the world's largest genomic database linked to a health care system.

The goal of the Million Veteran Program (MVP) is to learn more about how genes affect health, in order to improve health for Veterans, and ultimately, everyone. MVP uses genetic, military exposure, lifestyle, and health information from MVP Veteran partners to better understand the role of genes and health. With more than 775,000 partners as of August 2019, MVP is the largest database of its kind in the world—an integrated health and genomic database tied to a health care system. It is also the world's largest genomic cohort of Veterans with the largest representation of minorities in the U.S.

MVP research is already leading to new ways of preventing and treating illnesses in Veterans and others. Questions that may be answered from MVP findings include "Why does a treatment work well for some people but not for others?"; "Why are some people at greater risk for developing certain diseases?"; and "How can we prevent certain illnesses in the first place?"

Why is it important to study genes?

Genes carry instructions for building and maintaining our bodies. They determine the color of our eyes and hair, our height, and other personal features. Small differences in our genes may also explain why some people get diseases and others do not. In addition, genes interact with our lifestyle factors and environment to influence our risk for common illnesses, such as heart disease, diabetes, and cancer. Genes may also affect how people respond to certain medications and treatments. Having a better understanding of how genes work may help to prevent and improve treatment of disease.

How does this research help Veterans?

Veterans—and in fact everyone—stand to benefit greatly as MVP researchers learn more about the effects of genes on health. Screening, diagnosis, and treatment for some illnesses—such as some forms of cancer—have already been improved through knowledge about the effects of certain genes. MVP is helping lead to new knowledge about which genes put people at risk for certain diseases, and which ones affect how people respond to treatment. This knowledge may eventually lead to better treatments and preventive measures for many common diseases. Projects using MVP data are also looking at illnesses especially common among combat Veterans, such as PTSD and TBI.

What has MVP accomplished so far?

Projects using MVP data are already underway in VA, on topics ranging from mental health to heart disease. The program has developed an impressive informatics infrastructure to ensure secure, efficient access to data for authorized researchers. MVP leaders are working with the Department of Defense, the National Institutes of Health, and the Department of Energy to further expand the program and optimize its impact.

Joining MVP

What does joining MVP involve?

MVP has partnered with Veterans who volunteer to share their health information, as well as genetic material. Veterans are able to join MVP in-person at participating MVP locations across the country or online at mvp.va.gov.

Joining MVP involves:

- Filling out surveys through the mail or online about health and lifestyle.
- Providing a blood sample for genetic analysis at participating MVP locations.
- Permitting MVP access to information from health records on an ongoing basis.
- Agreeing to future contact by MVP for additional research opportunities.

Why is it important that so many Veterans join MVP?

In order to best learn about the role of genes, health researchers compare genetic and health information from hundreds of thousands of people. The more Veteran partners MVP has, the better researchers can understand the wide, diverse spectrum of human demographic and health traits and gain valuable knowledge to improve health care.

MVP research will help answer questions such as:

Why does a treatment work well for some people but not others?

Why are some people at greater risk for certain diseases?

Confidentiality and Data Security

What happens to the health information and blood samples that are collected?

Samples and health information collected as part of MVP are available to approved researchers for projects approved by appropriate VA oversight committees. Researchers who are approved access to analyze MVP samples and data do not receive names, addresses, dates of birth, or social security numbers of Veteran partners. Also, researchers can access MVP data only through a secure portal in a VA-approved environment.

How are health records accessed?

If consent is given to join, MVP accesses health information from health records as needed and adds that information to the VA Central Research Database so that partners' health status and health care can be followed over time. All information is labeled with a code that does not identify MVP partners directly.

How are confidentiality and privacy protected?

The security and confidentiality of data are MVP's top priorities. Confidentiality is protected through a variety of methods. DNA samples and health information are stored without name, address, date of birth, or social security number. Rather, samples and data are labeled with a code. Only limited MVP staff have access to the key for the code. It is necessary to keep the key for the code to connect partners with their information and samples in order to track medical records, contact partners again, or destroy the samples if a partner withdraws.

For more information or to join online, please go to **mvp.va.gov**. Call the MVP Info Center toll-free at **866-441-6075** with any questions or to schedule an MVP visit.