Women Veterans in Research

Historically, women were underrepresented in biological and medical research, leading to knowledge gaps that can lead to problems including misdiagnoses and drugs that may affect men and women differently. Although this has been changing in recent years, women minority status in the Veteran population can make it much more difficult for VA researchers to recruit enough women to get statistically valid results. By volunteering to participate in VA research, women Veterans can make a big difference for other Veterans of today – and the future.

So far, only 8% of more than 600,000 MVP enrollees are women. The goal is to increase the number to at least 11% with various backgrounds that will increase the probability for the results to be of greater statistical validity.
What Is Involved in Participation?
Active involvement in this program includes:

- Filling out surveys about health and health-related behaviors;
- Providing a blood sample (containing DNA and other substances) that will be stored for future research;
- Completing an optional health assessment; and
- Allowing secure access to VA and VA-linked medical and health information, including past and future health records.

MVP Confidentiality & Privacy Protection
Protecting the privacy of Veterans is our top priority. We will make every effort to protect MVP participants’ confidentiality and to make sure that their identity does not become known.

- All blood samples will be stored in a secured VA Healthcare System laboratory facility (also called a biorepository).
- All blood samples and medical and other personal information will be labeled with a code so that no one can directly identify participants. Only a small number of authorized VA employees will have access to the code.
- The research database containing medical and genetic information will be encrypted so that no one can read it or access it without special permission.

The goal is to make this opportunity to participate in MVP available to as many Veterans as possible, and to follow and update their health information over time. Enrollment is expected to reach 1 million participants over the next few years.

Below are the top five symptoms currently reported by women Veteran enrollees:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Women Enrollees (n=51,175)%</th>
<th>% Enrollees reporting conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>15888</td>
<td>31%</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>14001</td>
<td>27%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>13714</td>
<td>26%</td>
</tr>
<tr>
<td>Acid reflux/GERD</td>
<td>12492</td>
<td>24%</td>
</tr>
<tr>
<td>Anxiety/Panic disorder</td>
<td>10290</td>
<td>20%</td>
</tr>
</tbody>
</table>

Research Studies
MVP is on the forefront of a science revolution made possible by new ways to analyze our genes, the rapid expansion in the availability of health care data, and the development of ever more powerful computers to analyze these rich data. In many ways MVP represents a new way of doing research. Never before have we tried to assemble as much data that comes from our genes and combine it with large amounts of health data. Below is a list of studies underway as of fall 2017:

- Gulf War Illness risk factors
- Posttraumatic stress disorder risk factors
- Genetics of schizophrenia and bipolar illness
- Genetic vulnerability to substance abuse
- Heart disease risk factors
- Genetics related to heart disease
- How genes affect kidney disease
- Genetic risk for macular degeneration
- Genetic risk for suicide
- New computer algorithm to search database
- How gene variation relates to disease
- Genetics of osteoarthritis
- Genetics of diabetes
- Genes related to tinnitus

Predicting breast cancer risk for women Veterans-
Researchers are using MVP data to build a new screening strategy for breast cancer. The team is studying genetic and clinical markers to predict breast cancer risk. They will use this information to develop more personalized screening strategies for individual women, rather than relying, say, on age alone to plan screening. They are also looking at how military experience and race might affect breast cancer risk. Most current screening plans are based on studies of civilian, Caucasian women. This is an important study to look at a more diverse population in women who served.

Enrolling in the Million Veteran Program is an easy way that you can continue serving your fellow Veterans and your nation. Learn more about why others are signing up, and join fellow Veterans in this important health research initiative. Women Veterans of today – and tomorrow – are counting on us to make a difference in research that could save their lives.

For more information about MVP, visit www.research.va.gov/MVP, or call toll free 866-441-6075