On behalf of Paralyzed Veterans of America’s Multiple Sclerosis Committee, welcome to our inaugural PVA MS newsletter!

This is an exciting time for us as we have a lot of efforts underway to expand our operations and build bridges to the larger MS community. Since our formation in March, followed by PVA’s membership expansion inviting all Veterans with MS to join our organization in May, the MS Committee has been working around-the-clock. We regularly work with all 33 PVA Chapters across the U.S. to appoint leaders at the local level, explore partnerships, and create memorable events and experiences designed exclusively for Veterans with MS. Founded by and run by Veterans, PVA created the MS Committee to act as a voice on legislative issues concerning veterans with MS, provide first-hand input from its members with MS, and serve as an expert resource for all Veterans living with the disease.

There is a lot we want to take on in the coming months but most importantly, we want you to know that PVA cares. We care about your health and well-being. We care about your families and caregivers. We also value your input and want to ensure your voice is heard. Only by working together can we better ensure our nation is responsive to all the needs of our brothers and sisters with MS.

Below you’ll see two teams that focus on specific areas of interest we want to offer. In short, we want to focus on what PVA does best – get us out of isolation. Please send us your feedback and suggestions.

And in case it wasn’t clear – you are not alone.

Sincerely,

Izzy Abbass
PVA MS Committee Co-Chair
We Need Your Input... Join an MS Committee Team TODAY!

As we work on initiatives, we need more input and assistance from you. While we don’t need you to get involved with everything, we do need you to think about doing something! Check out more about our MS Committee Teams below.

**Recreation Team**
We know MS presents unique challenges when it comes to participating in traditional sports and recreational activities. Among some of the events we’d love to coordinate or highlight include: a PVA MS Committee Retreat, similar to the annual PVA Women Veterans Empowerment Retreat, as well as Chapter-led events like local MS Walks. This team will work with PVA’s Sports & Recreation Department to explore and organize new opportunities for those living with MS.

**Newsletter Team**
We are a trusted resource for all Veterans living with MS and welcome ideas and submissions for future editions of our MS Committee newsletter. This team will work together to ensure vital information concerning MS is relayed to the masses and that subscribers stay informed and abreast of the latest innovations, studies, and MS news.

If you are interested in helping out or have questions about the teams, email us at MSCommittee@PVA.org

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**Upcoming Events**

- **MS Committee Newsletter Team Meeting** (virtual)—Jan 19
- **PVA National Convention** (Omaha, Nebraska)—May 9-13
- **June CMSC Convention** (Denver, Colorado)—May 30
- **PVA Healthcare Summit and Expo** (Orlando, Florida)—Aug 14-17
MULTIPLE SCLEROSIS

Multiple sclerosis (MS) is an immune-mediated inflammatory demyelinating disease of the central nervous system, affecting approximately 400,000 people in the U.S. and more than TWO MILLION people worldwide. The inflammatory demyelination and axonal injury that characterize MS result in significant clinical disability and economic burden. This study makes a useful contribution to the literature on temporal changes in the incidence of MS by sex and race/ethnicity.

FINDINGS
- Between 2007 and 2016, a total of 2,031 active component service members received incident diagnoses of MS
- The overall unadjusted incidence rate was 14.9 cases per 100,000 p-yrs
- During the surveillance period, unadjusted annual incidence rates of MS decreased by 25.4%
- The highest overall incidence rates were observed among service members diagnosed after age 30 with rates peaking among those aged 40 years or older.

Annual incidence rates of MS were higher among female service members than male service members and decreased by 42.2% during the 10-year period.

The higher overall incidence of MS among non-Hispanic blacks was found among females, and to a lesser degree, among males.

MEDIAN AGE AT MS CASE-DEFINING DIAGNOSIS
- Age 32 years among active component members
- Age 37 years among reserve/guard members
- Age 48 years among non-service member beneficiaries

COMMON MS SYMPTOMS
- Numbness
- Tingling in limbs
- Visual loss
- Double vision
- Motor weakness
- Gait disturbance

Access the full report in MSMR Vol. 24 No. 8 August 2017 at Health.mil/MSMR
Highlights from PVA Healthcare Summit

Several members of the MS Committee attended the annual PVA Healthcare Summit & Expo in Dallas this past August, which had an educational track specifically about MS. This was an invaluable offering and the MS Committee will advocate for the inclusion of more MS-specific tracks at future Summits. While there were a number of great sessions, one that stuck out in particular was *Harmonization of MRI Settings for MS Patients*, which was presented by Frances Bagnato MD, PhD, a VA neurologist at the Nashville VA and Associate Director of Research for the VA Multiple Sclerosis Center of Excellence East. Dr. Bagnato presented some interesting facts on the need to have continuity on MRI devices when conducting scans for those with MS. Below is an excerpt from Dr. Bagnato’s commentary titled, ”Harmonizing Magnetic Resonance Imaging Protocols for Veterans with Multiple Sclerosis.”*

"There are three crucial milestones in the lifespan of a person with MS that require Magnetic resonance imaging (MRI). Those include initial diagnosis, the follow-up to monitor disease and/or treatment effect, and the assessment of medication safety. Since standardized MRI protocols are fundamental for care of Veterans with MS, an international task force including representatives from the Veterans Health Administration worked together to update guidelines for imaging the brain, spinal cord, and optic nerve in people with MS."

Featured on the following page is the 2021 MRI wallet card for MS that resulted from those guidelines. Since periodic MRI scans are recommended over the course of your life, consider sharing this resource with your healthcare team. Also available at:

https://mscare.sharefile.com/share/view/s16fa7f9d0c214c1cb5bd8f809ac07215?skipNativeCheck=true

# 2021 MAGNIMS-CMSC-NAIMS STANDARDIZED MRI PROTOCOL

<table>
<thead>
<tr>
<th>Field Strength</th>
<th>Brain</th>
<th>Spinal Cord</th>
<th>Optic Nerve</th>
</tr>
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<tbody>
<tr>
<td>≥1.5 T (preference) or 2T</td>
<td>≥1.5 T</td>
<td>≥1.5 T</td>
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<tr>
<td>Acquisition</td>
<td>3D (preferred) or 2D</td>
<td>2D or 3D</td>
<td>2D or 3D</td>
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<tr>
<td>Slice Thickness</td>
<td>3D: 1mm isotropic&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Sagittal ≤3mm, no gap</td>
<td>≤2-3mm, no gap</td>
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<tr>
<td>2D: ≤3mm, no gap&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Axial ≤5mm, no gap</td>
<td>Axial ≤5mm, no gap</td>
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<tr>
<td>In-Plane Resolution</td>
<td>≤1mm x 1mm</td>
<td>≤1mm x 1mm</td>
<td>≤1mm x 1mm</td>
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<tr>
<td>Coverage</td>
<td>Whole brain (include as much of cervical cord as possible)</td>
<td>Whole cord (cervical, thoracic in-planes)</td>
<td>Optic nerve &amp; chiasm</td>
</tr>
<tr>
<td>Axial Scan Orientation</td>
<td>Subcallosal plane</td>
<td>Perpendicular</td>
<td>Align to optic nerve &amp; chiasm orientation</td>
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<sup>1</sup> Isotropic preferred; if non-contiguous (through-plane and in-plane), not ≥1.5 mm with 0.75 mm overlap.

<sup>2</sup> Diffusion-weighted imaging: slice thicknesses should be ≥5mm with no more than a 10-30% slice gap.

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**Brain**

- Axial T<sub>1</sub>
- Sagittal & axial FLAIR (or 3D)
- Post-Gd axial (or 3D) T<sub>1</sub>
- Diffusion-weighted imaging
- DIR or PSIR
- High-resolution 3D T<sub>1</sub> (brain volume assessment)
- Susceptibility-weighted imaging

**Optic Nerve**

- Axial & coronal fat-suppressed T<sub>1</sub> or STIR
- Post-Gd axial & coronal fat-suppressed T<sub>1</sub>

**Spinal Cord**

- Sagittal at least 2 of T<sub>1</sub>, PD or STIR
- Sagittal 3D T<sub>1</sub>, (PSIR, MPRIAGE)<sup>3</sup> cervical only
- Axial T<sub>1</sub> or T<sub>1</sub>
- Pre-Gd Sagittal T<sub>1</sub>
- Post-Gd<sup>4</sup> Sagittal T<sub>1</sub>
- Post-Gd<sup>4</sup> axial T<sub>1</sub>

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**Recommended Core**

| Diagnosis of MS | Follow-up monitoring of disease activity and effectiveness of disease-modifying treatment (DMT) | Safety monitoring for DMT |
| Dx | Fm | Sm |
| Dx | ± | ± |

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**Optional**

- T<sub>2</sub> (TSE/FSE, turbofast spin echo)
- Axial T<sub>1</sub> optional if 3D FLAIR with sagittal/axial reconstructions are available
- Gd macromolecular agent, 0.1mm/kg body weight, minimum delay 5-10 minutes
- T<sub>2</sub> (TSE/FSE)
- DDx for differential diagnosis

**High resolution 3D T<sub>1</sub>**

- (e,g, MPRIAGE/MP2RAGE) magnetization-prepared rapid acquisition of gradient echoes;
- IR SPGR, inversion recovery prepared spoiled gradient; TFE, turbo field-echo)

**STIR (short tau inversion recovery)**

- PD (proton-density, TSE/FSE)
- T<sub>2</sub> (T<sub>2</sub> gradient recalled echo)
National MS Committee Members

Hack Albertson – Co-Chair
Izzy Abbass – Co-Chair
Joe Bludeau – External Org Coordination
Ashley Lee – Podcast and Social Media
Jarrod Harris – Chapter MS Lead Liaison
Mike Partridge – Committee Member
Ben Hofmeister – Committee Member and Blogger

To contact your Chapter MS Lead, please call or email Jerrod Harris at 443-814-3777 or jerrod.r.harris@gmail.com, or reach out to your local Chapter office.

Staff
Cheryl Vines – Director of Research and Education
Juliet Pierce – Associate Director of Medical Services

PVA Chapter MS Leads (By Location and Name)

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<tr>
<th>Arizona</th>
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<th>New England</th>
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<td>Jeff D. Cook</td>
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