

VeteransAgainstAlzheimer's

VETERANS AND ALZHEIMER'S: MEETING THE CRISIS HEAD ON

An Issue Brief from VeteransAgainstAlzheimer's
October 2, 2017

PART 1: THE CRISIS

Alzheimer's disease is a largely invisible, but pressing, long-term challenge in the military veteran community—impacting older veterans today, particularly Vietnam era, and younger veterans, many from the Iraq and Afghanistan conflicts, in the coming decades.

SNAPSHOT

Alzheimer's is a progressive brain disease that slowly destroys memory and thinking skills, and is the most common form of dementia. Veterans face unique risk factors for Alzheimer's as a direct result of their service, including military-related injuries, conditions such as post-traumatic stress and traumatic brain injury, and other factors.¹

Age is the number one known risk factor for Alzheimer's, and that risk increases greatly after age 65. 49 percent of veterans are age 65 or older, compared to just 15 percent of the general population.²

The U.S. Department of Veteran's Affairs (VA) estimates that more than 750,000 older veterans have Alzheimer's disease and other dementias.³ The VA estimates that the number of enrollees with Alzheimer's grew 166 percent from roughly 145,000 in 2004 to 385,000 in 2014.^{4,5}

Older veterans who have suffered a traumatic brain injury (TBI) are 60 percent more likely to develop dementia, and dementia onset occurs on average two years earlier than veterans without TBI.⁶

Veterans face unique risk factors for Alzheimer's as a result of their service:

Traumatic Brain Injury

Post-Traumatic Stress

Blast-Induced Neurotrauma

Successive Concussion Syndrome

Depression

49%

of veterans are age 65 or older, putting them at greater risk for Alzheimer's compared to just

15%

of the general population over age 65.

22 percent of all combat wounds in Afghanistan and Iraq were brain injuries, nearly double the rate seen during Vietnam⁷—increasing these younger veterans’ lifetime Alzheimer’s risk.

The prevalence of dementia diagnosis is two times higher among veterans with post-traumatic stress.⁸

Minority communities are at greater risk for Alzheimer’s, and minority veterans are predicted to increase from 23.2 percent of the total veteran population in 2017 to 32.8 percent in 2037.⁹

This Issue Brief outlines the current Alzheimer’s crisis in the veteran community, describes veterans’ unique risk for the disease, and examines barriers to effective diagnosis, treatment, and care for these veterans.

In this Issue Brief, VeteransAgainstAlzheimer’s (VA2) calls for collaborative initiatives, and greater research and investments to tackle the growing dementia crisis in our veteran community. VA2 believes the country has an urgent responsibility to meet the needs of veterans with Alzheimer’s, their caregivers and families.

“The VFW knows that this is a major issue for veterans—especially when data indicates that the risks associated with military service make veterans more likely to develop Alzheimer’s and other forms of dementia.”

— Bob Wallace, Executive Director, Veterans of Foreign Wars of the United States

THE ALZHEIMER’S EPIDEMIC

- **Alzheimer’s disease is always fatal.** It is the only top 10 cause of death in U.S. with no cure, no means of prevention, and no disease-modifying treatments.
- An estimated 5.5 million people in the U.S. are living with Alzheimer’s. And this number is expected to grow to nearly 14 million by 2050.
- Most people develop Alzheimer’s when they are over age 65. However, 200,000 people under age 65 in the U.S. are living with what’s known as Early Onset Alzheimer’s.
- Women are 2.5 times more likely to die of Alzheimer’s. And African Americans are 2 times and Latinos 1.5 times more likely to suffer from Alzheimer’s than non-Hispanic whites.
- Alzheimer’s is not “normal aging.” Symptoms appear gradually and get worse over time. Symptoms usually start with difficulty remembering new information. In advanced stages, symptoms include confusion, mood and behavior changes, inability to care for one’s self and perform basic life tasks.
- The most recent research shows Alzheimer’s and other dementias are the third leading cause of death in the U.S., following cancer and heart disease.
- Alzheimer’s is also the most expensive disease in America. In 2017, the direct costs of caring for those with Alzheimer’s and other dementias will total \$259 billion.

THE RISKS, IMPACTS, AND CHALLENGES FOR VETERANS WITH ALZHEIMER’S

Alzheimer’s disease is both an urgent health care challenge among older veterans and a long-term threat to younger veterans. Each of these groups face unique Alzheimer’s risk factors tied directly to their service, including post-traumatic stress (PTS), depression, traumatic brain injury (TBI), successive concussion syndrome, and blast-induced neurotrauma (BINT).

Unfortunately, stigma, limited resources, and low levels of awareness are barriers to effective Alzheimer's diagnosis and care for these veterans. This places an immense burden on caregivers and families, while raising overall health care costs—indicating an urgent need for action.

CONTEXT: A DRAMATIC RISE IN VETERANS WITH ALZHEIMER'S

The United States is in the midst of a dramatic rise in the number of veterans with Alzheimer's disease and other dementias, and many of these new cases are directly attributable to military service.

The large population of older veterans elevates Alzheimer's as a primary health care challenge. Currently, 13 million veterans are over the age of 55, representing two-thirds of the entire veteran population, with the largest cohort from the Baby Boomers who served during the Vietnam War.¹⁰ The U.S. Department of Veteran's Affairs (VA) estimates that more than 750,000 older veterans have Alzheimer's disease and other dementias.¹¹

The number of veterans with Alzheimer's has surged in recent years. According to a study published in *Current Alzheimer Research*, approximately 420,000 veterans will have developed new cases of Alzheimer's between 2010 and 2020.¹² Among Veteran's Affairs enrollees, the VA estimates that the number with Alzheimer's grew 166 percent from roughly 145,000 in 2004 to 385,000 in 2014,^{13,14} more than doubling during that period.

Many of these new cases of Alzheimer's are directly attributable to military service. The same study in *Current Alzheimer Research* finds that approximately one-third of new cases of Alzheimer's are a direct result of service-related injuries, conditions, and other factors.¹⁵

“Research with World War II veterans has shown that service members exposed to brain trauma are at a heightened risk for Alzheimer's disease and other dementias. With traumatic brain injury being the signature injury of the Iraq and Afghanistan conflicts, now is the time to tackle this pending healthcare crisis.”

— Mark P. Burns, Ph.D, Associate Professor of Neuroscience, Georgetown University

CAUSES: VETERANS' UNIQUE RISK FACTORS FOR ALZHEIMER'S

Veterans of all ages face unique risk factors for Alzheimer's because of their military service, including post-traumatic stress, depression, traumatic brain injury, and blast-induced neurotrauma. This creates a clear and compelling obligation for greater support to meet the needs of veterans with Alzheimer's.

Post-traumatic stress and depression can as much as double veterans' Alzheimer's risk. The prevalence of dementia diagnosis is two times as high among veterans with PTS, according to a study in *Journal of the American Geriatrics Society*.¹⁶ This risk factor is a particular concern for those who served in Vietnam, as the VA estimates that 30 percent of Vietnam veterans suffer from PTS during their life—four times the rate of the general U.S. population.¹⁷ Additionally, from 2010 to 2020, new cases of Alzheimer's linked to depression in veterans will be double the number that would be projected in the civilian population.¹⁸ PTS and depression are also associated with suicidal ideation and the rising rate of suicide among veterans, which increased by nearly 50 percent between 2003 and 2008.¹⁹

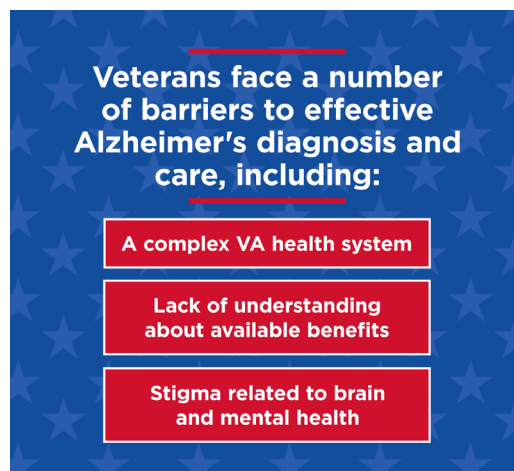
Traumatic brain injury increases the threat of Alzheimer's in veterans. A study of more than 180,000 older veterans, published in *Neurology*, finds that older veterans who have suffered a traumatic brain injury are 60 percent more likely to develop dementia than veterans who has not suffered a traumatic brain injury, and dementia onset occurs on average 2 years earlier than those without TBI.²⁰

Veterans, particularly younger individuals, face a long-term Alzheimer's risk due to TBI and blast-induced neurotrauma. Research finds that 22 percent of all combat wounds in Afghanistan and Iraq were brain injuries, nearly double the rate seen during Vietnam²¹—increasing these younger veterans' lifetime Alzheimer's risk. Additionally, high rates of blast injuries and blast-induced neurotrauma are associated with irreversible, chronic brain tissue damage, including chronic neurodegeneration, long-term neurological deficits, and memory loss, according to a variety of scientific studies.²²

BARRIERS: CONSTRAINTS TO EFFECTIVE DIAGNOSIS, CARE, AND TREATMENT

Many veterans with Alzheimer's and their caregivers struggle to find and afford effective diagnosis, care, and treatment. This places a devastating burden on veterans, caregivers, and their families. This burden generates high health care costs for both the visible and invisible wounds of war to our service members and their families.

There is a widespread need for effective Alzheimer's diagnosis, care, and treatment for veterans. From 2010 to 2020, 140,000 new cases of Alzheimer's directly attributable to military service will cost between \$5.8 billion and \$7.8 billion.²³ Additionally, research published in *Alzheimer's and Dementia* finds that veterans with dementia are more likely to be hospitalized and their hospital stays are often significantly longer, increasing costs.²⁴



However, veterans often struggle to understand and use the VA system. An analysis of VA surveys found that roughly 63 percent of older veterans say they have little or no understanding of the health care benefits available to them, such as the Aid and Attendance Pension program and the Caregiver Support program.²⁵ And according to a VA report, veterans often face long wait times—an average of 27 days for a primary care appointment and 36 days for a referral to a specialist²⁶—slowing and discouraging timely Alzheimer's diagnosis.

“My husband, Jim, retired after 23 years in the Air Force and thought he would be able to get help with his Younger Onset Alzheimer's Disease. But we were left to our own devices for non-medical help and assisted living. We must work toward not only a cure but making sure those who have served and protected us are protected themselves.”

— Karen Garner, caregiver to James B. Garner, Senior Master Sergeant, USAF (Ret.)

Stigma related to brain and mental health can slow Alzheimer's care among veterans. A study in *Military Behavioral Health* finds that many veterans perceive stigma related to seeking help for brain health, which significantly lowers treatment utilization²⁷ and can create a barrier to effective Alzheimer's diagnosis and care.

“Active and retired service members put their brains at risk by exposures to extreme conditions such as stress, sleep deprivation, toxic products, traumatic brain injury and PTS due to physical changes to the brain system. Stigma about the brain keeps them from seeking the help they need causing the problems to worsen over time. We must get ahead of the growing risk of Alzheimer’s for the increasing number of veterans who served our country.”

— Sandra Bond Chapman, Ph.D, Founder and Chief Director, Center for BrainHealth, Dee Wylie Distinguished University Professor, The University of Texas at Dallas

Without effective support, Alzheimer’s disease takes a devastating toll on veterans’ caregivers. A significant share of family members caring for veterans with dementia suffer negative effects from their caregiving, including social isolation and depression, according to a study in *The American Journal of Geriatric Psychiatry*.²⁸

PART 2: OUR RESPONSE: THE STORY AND MISSION OF VETERANSAGAINSTALZHEIMER’S

VeteransAgainstAlzheimer’s (VA2), a network of UsAgainstAlzheimer’s, is taking action to support these brave veterans and their families—now and in the future—by raising awareness, and calling for increased resources, programs and funding for needed research.

Who We Are: VeteransAgainstAlzheimer’s

UsAgainstAlzheimer’s is launching VeteransAgainstAlzheimer’s to spotlight these challenges and find solutions for the veterans and families impacted by Alzheimer’s disease and other dementias. VA2 is the first national network of veterans and their families, military leaders, veterans service organizations, researchers and clinicians, who are focused on raising awareness of Alzheimer’s as an urgent health issue for veterans.



SHAWN’S STORY

Shawn Taylor, a Board Member of UsAgainstAlzheimer’s, conceived of VeteransAgainstAlzheimer’s after witnessing four of the people closest to her fight this disease: her mother, her father—a retired Lieutenant Colonel and Purple Heart recipient, her grandmother, and her grandfather—a retired Colonel and West Point graduate.

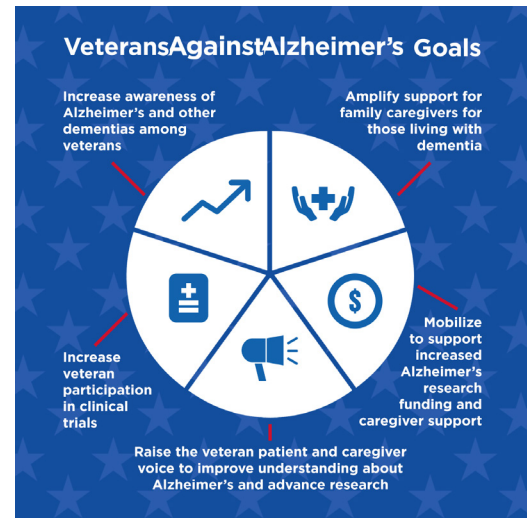
Recognizing veterans’ unique risk for Alzheimer’s and their intense caregiving needs, Shawn founded VA2 to shine a light on the Alzheimer’s crisis in the veteran community and call for increased collaboration to better support these veterans and their families.

According to Shawn, *“This is very personal to me. Love of country and support for our military is in my blood, and more than likely, so is Alzheimer’s. We all know what this disease looks like and the destruction it brings to the families. I am on a mission to raise awareness and to educate the veteran community about Alzheimer’s, and encourage these brave men and women to join us to help stop this indiscriminate disease. We forgot one generation forty years ago, and we won’t make that mistake again. We won’t forget!”*

OUR PILLARS

Our activities focus on five pillars:

- Increase awareness of Alzheimer's and other dementias among veterans
- Amplify support for family caregivers for those living with dementia
- Mobilize to support increased Alzheimer's research funding and caregiver support
- Raise the veteran patient and caregiver voice to improve understanding about Alzheimer's and advance research
- Increase veteran participation in clinical trials



“We need to understand so much more about why brain injuries sustained in battle put veterans at greater risk for Alzheimer's. We must encourage veterans to participate in clinical studies to learn about the long-term effects of brain injuries, so we can do everything in our power to mitigate the impact on those who have given so much to this country.”

— George Vradenburg, Chairman and Co-Founder, UsAgainstAlzheimer's

“There is increasing scientific support for the association between a history of traumatic brain injury, including combat-related concussions, and later life neurodegeneration that contributes to Alzheimer's and other dementias. The jointly VA and DoD funded Chronic Effects of Neurotrauma Consortium is working with VeteransAgainstAlzheimer's to raise awareness of dementias among service members and veterans. Together we are striving to increase veteran participation in dementia clinical trials as a way of finding the answers to the causes and interventions for neurodegeneration, and ultimately seeking the cure for dementias.”

— David X. Cifu, MD, Professor and Chairman, Department of Physical Medicine and Rehabilitation, Virginia Commonwealth University School of Medicine; Senior TBI Specialist, U.S. Department of Veterans Affairs; Principal Investigator, VA/DoD Chronic Effects of Neurotrauma Consortium

“Our veterans fight and win our nation's wars. Let us all join with them to help fight and win the battle against Alzheimer's.”

— Arnold Fields, Major General, United States Marine Corps (Ret.)

For more information, please visit veteransagainstalzeimers.org or contact Virginia Biggar at vbiggar@usagainstalzeimers.org.

VeteransAgainstAlzheimer's is one of seven national networks of UsAgainstAlzheimer's, an innovative non-profit organization demanding—and delivering—a solution to Alzheimer's. Driven by the suffering of millions of families, UsAgainstAlzheimer's presses for greater urgency from government, industry and the scientific community in the quest for an Alzheimer's cure—accomplishing this through effective leadership, collaborative advocacy, and strategic investments.

- ¹ Veitch, et al. "Military Risk Factors for Cognitive Decline, Dementia and Alzheimer's Disease." *Current Alzheimer Research*. 2013. <https://www.ncbi.nlm.nih.gov/pubmed/23906002>
- ² "Aging Veterans in the United States: A snapshot of older veterans and their social, economic, and housing characteristics." Housing Assistance Council. 2016. <http://www.ruralhome.org/storage/documents/publications/rrrreports/rrr-aging-veterans.pdf>
- ³ "Projections of the Prevalence and Incidence of Dementias Including Alzheimer's Disease for the Total Veteran, Enrolled and Patient Populations Age 65 and Older." U.S. Department of Veterans Affairs. 2013. https://www.va.gov/GERIATRICS/docs/Methodology_Paper_Projections_of_the_Prevalence_and_Incidence_of_Dementias_v5_FINAL.pdf
- ⁴ "Estimated Cases of Dementia in VA Enrollee Population." U.S. Department of Veterans Affairs. 2004. <https://www.va.gov/healthpolicyplanning/dementia/enrollee.pdf>
- ⁵ "Projections of the Prevalence and Incidence of Dementias Including Alzheimer's Disease for the Total Veteran, Enrolled and Patient Populations Age 65 and Older." U.S. Department of Veterans Affairs.
- ⁶ Barnes, et al. "Traumatic brain injury and risk of dementia in older veterans." *Neurology*. 2014. <http://www.neurology.org/content/early/2014/06/20/WNL.0000000000000616.short>
- ⁷ Sibener, et al. "Alzheimer's Disease prevalence, costs, and prevention for military personnel and veterans." *Alzheimer's & Dementia*. 2014. <https://www.ncbi.nlm.nih.gov/pubmed/24924663>
- ⁸ Qureshi, et al. "Greater Prevalence and Incidence of Dementia in Older Veterans with Posttraumatic Stress Disorder." *Journal of the American Geriatrics Society*. 2010. <https://www.ncbi.nlm.nih.gov/pubmed/20863321>
- ⁹ "Veteran Population Projections 2017 – 2037." U.S. Department of Veterans Affairs. 2016. https://www.va.gov/vetdata/docs/Demographics/New_Vetpop_Model/Vetpop_Infographic_Final31.pdf
- ¹⁰ "Aging Veterans in the United States: A snapshot of older veterans and their social, economic, and housing characteristics." Housing Assistance Council. 2016. <http://www.ruralhome.org/storage/documents/publications/rrrreports/rrr-aging-veterans.pdf>
- ¹¹ "Projections of the Prevalence and Incidence of Dementias Including Alzheimer's Disease for the Total Veteran, Enrolled and Patient Populations Age 65 and Older." U.S. Department of Veterans Affairs. 2013. https://www.va.gov/GERIATRICS/docs/Methodology_Paper_Projections_of_the_Prevalence_and_Incidence_of_Dementias_v5_FINAL.pdf
- ¹² Veitch, et al. "Military Risk Factors for Cognitive Decline, Dementia and Alzheimer's Disease."
- ¹³ "Estimated Cases of Dementia in VA Enrollee Population." U.S. Department of Veterans Affairs. 2004. <https://www.va.gov/healthpolicyplanning/dementia/enrollee.pdf>
- ¹⁴ "Projections of the Prevalence and Incidence of Dementias Including Alzheimer's Disease for the Total Veteran, Enrolled and Patient Populations Age 65 and Older." U.S. Department of Veterans Affairs.
- ¹⁵ Veitch, et al. "Military Risk Factors for Cognitive Decline, Dementia and Alzheimer's Disease."
- ¹⁶ Qureshi, et al. "Greater Prevalence and Incidence of Dementia in Older Veterans with Post traumatic Stress Disorder." *Journal of the American Geriatrics Society*. 2010. <https://www.ncbi.nlm.nih.gov/pubmed/20863321>
- ¹⁷ "How Common Is PTSD?" U.S. Department of Veterans Affairs. 2016. <https://www.ptsd.va.gov/public/ptsd-overview/basics/how-common-is-ptsd.asp>
- ¹⁸ Veitch, et al. "Military Risk Factors for Cognitive Decline, Dementia and Alzheimer's Disease."
- ¹⁹ Leo Sher, María Dolores Braquehais, and Miquel Casas. "Posttraumatic stress disorder, depression, and suicide in veterans." *Cleveland Clinic Journal of Medicine*. 2012. <https://msrc.fsu.edu/system/files/Sher%20et%20al%202012%20Posttraumatic%20stress%20disorder.J.pdf>
- ²⁰ Barnes, et al. "Traumatic brain injury and risk of dementia in older veterans." *Neurology*. 2014. <http://www.neurology.org/content/early/2014/06/20/WNL.0000000000000616.short>
- ²¹ Sibener, et al. "Alzheimer's Disease prevalence, costs, and prevention for military personnel and veterans." *Alzheimer's & Dementia*. 2014. <https://www.ncbi.nlm.nih.gov/pubmed/24924663>
- ²² Ibolja Cernak. "Understanding Blast-Induced Neurotrauma: How Far Have We Come?" *Concussion*. 2017. <https://www.futuremedicine.com/doi/pdf/10.2217/cnc-2017-0006>
- ²³ Veitch, et al. "Military Risk Factors for Cognitive Decline, Dementia and Alzheimer's Disease."
- ²⁴ Sibener, et al. "Alzheimer's Disease prevalence, costs, and prevention for military personnel and veterans."
- ²⁵ Chris Adams. "VA outreach lags as many veterans unaware of benefits." *McClatchy Newspapers*. 2012. <http://www.mcclatchydc.com/news/nation-world/national/article24740527.html> (The Veterans Aid and Attendance Pension provides benefits that reduce the cost of care for veterans and surviving spouses who require assisted living. The VA Caregiver Support Program offers training, educational resources, and multiple tools for caregivers.)
- ²⁶ Donovan Slack. "Inaccurate VA wait times preclude thousands of vets from getting outside care, probe finds." *USA Today*. 2017. <https://www.usatoday.com/story/news/politics/2017/03/03/veterans-affairs-inspector-general-widespread-inaccuracies-wait-times/98693856/>
- ²⁷ Kulesza, et al. "Help-Seeking Stigma and Mental Health Treatment Seeking Among Young Adult Veterans." *Military Behavioral Health*. 2015. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4672863/>
- ²⁸ Bass, et al. "Negative caregiving effects among caregivers of veterans with dementia." *The American Journal of Geriatric Psychiatry*. 2012. <https://www.ncbi.nlm.nih.gov/pubmed/22251867>