



## Pain Management

VA is working to develop powerful new approaches to alleviate veterans' pain, which may result from spinal cord injury, burns, amputations, traumatic brain injury, or other conditions that are not combat related. VA's research program focuses on assessing, managing, and treating chronic pain; helping veterans seamlessly transition to civilian life; developing novel therapies for nerve-related pain; and developing new pain coping strategies.

### *Examples of VA research advances*

- **Cellular clues**—VA researchers are examining changes at the cellular and molecular levels for clues about what causes pain and how to treat it. For example:
  - Using a rat model they developed to resemble a debilitating pain condition called complex regional pain syndrome (CRPS), investigators are working to characterize cellular changes in support of promising new treatments for pain and inflammation.
  - Investigators have identified a cellular pathway that conveys pain signals to the brain and hope to expand upon the discovery to develop a new pain treatment.
  - VA researchers have identified a molecular basis for “phantom pain,” in which patients have the sensation of pain in a limb that has lost all feeling, as in spinal cord injury, or in a limb that is no longer there, as in amputation.
- **Vaccine's pain effect**—Tested by VA and the National Institutes of Health (NIH), a vaccine for shingles not only substantially reduces incidence of shingles, but also greatly cuts the risk of severe chronic nerve pain known as post-herpetic neuralgia.
- **More promising projects**—With the Department of Defense, VA is funding a study of the benefits of intervening early with regional anesthesia for pain control after certain kinds of combat-related traumatic injuries. Other projects VA is initiating are gene therapy for spinal cord pain and approaches to chronic back pain including education, exercise, chiropractic care, and telehealth outreach.

### Facts About Pain Management

Pain is one of the most common reasons people consult a physician and is cited as the most common symptom in soldiers returning from combat. Research suggests that a quarter of returning Operation Enduring Freedom/Operation Iraqi Freedom veterans report chronic pain that interferes with their daily activities—among the most common types, back pain from the weight of body armor and equipment and pain from traumatic nerve injury. Believing that no patient should suffer preventable pain, doctors and nurses throughout the VA are required to treat pain as “a fifth vital sign,” to be assessed and recorded along with blood pressure, pulse, temperature, and breathing rate.

