Threat of Climate Change Found to Be Key Psychological and Emotional Stressor

**USU Doctors Contribute to White House Report on Impacts of Global Climate Change**

**Bethesda, Md.** – Climate change is a significant threat to the health of Americans, creating unprecedented health problems in areas where they might not have previously occurred, according to a report released April 4 by the White House.

The report, “The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment,” was developed by the U.S. Global Change Research Program, and outlines the impacts climate change has on human health, including mental health and well-being. Contributing to this report and its findings, were doctors from the Center for the Study of Traumatic Stress at the Uniformed Services University of the Health Sciences (USU), to include the center’s director and chair of the USU Department of Psychiatry, Dr. Robert J. Ursano, and assistant chair of the USU Department of Psychiatry, U.S. Public Health Service Cmdr. (Dr.) Joshua Morganstein.

The threat of climate change has been found to be a key psychological and emotional stressor, and consequences can range from minimal stress and distress to clinical disorders, such as anxiety, depression, post-traumatic stress, and suicidal thoughts, according to the report. Messages from the media as well as public communication about climate change, can affect perceptions of physical and societal risks, consequently affecting mental health and well-being, for example. An estimated 40 percent of Americans report hearing about climate change in the media at least once a month, and about half of Americans reported being worried about climate change in 2015, according to a survey, the report states.

In more extreme cases, such as natural disasters causing injuries and deaths, damaged homes and communities, individuals may experience post-traumatic stress disorder (PTSD), anxiety disorders, grief, and depression. All of these reactions have the potential to interfere with the individual’s functioning and well-being, according to the report.

The majority of affected people recover over time, although some will develop chronic psychological problems, according to the report. Among those most at risk for poor mental health outcomes are some groups previously shown to suffer high rates of disaster related psychological problems including farmers, immigrants, those with limited mobility, those living in coastal areas, those from Indigenous communities or tribes, and veterans.
Following exposure to Hurricane Katrina, veterans with pre-existing mental illness were at an almost 7 times greater risk for developing any additional mental illness, compared to those veterans without a pre-existing mental illness. Following hurricanes, increased levels of PTSD have been experienced by individuals who report less community support and help from neighbors and others.

Overall, the report continues, those who have been directly affected by a climate- or weather-related disaster are at increased incidence of suicidal thoughts and behaviors. Increases in both suicidal thoughts (from 2.8% to 6.4%) and actual suicidal plans (from 1.0% to 2.5%) were observed in residents 18 months after Hurricane Katrina. Following Hurricanes Katrina and Rita, a study of internally displaced women living in temporary housing found reported rates of suicide attempt and completion to be 78.6 times and 14.7 times the regional average, respectively.

Emerging evidence also shows those who are actively involved in climate change adaptation, or mitigation, might experience considerable health and well-being benefits, the report adds. These multiple psychological and environmental benefits do not necessarily minimize distress; however, when people do have distress related to relevant media exposure, or to thinking about climate change, taking action to address the issue can buffer against distress, the report states. Such engagement both addresses the threat and helps manage the emotional responses as people come to terms with—and adjust their understandings and lives in the context of—climate change.

In addition to mental health impacts, the report also outlines the effects of air quality, vector-borne diseases, water-related illnesses and food safety. For more information about the report, visit https://www.health2016.globalchange.gov.

# # #

About the Uniformed Services University of the Health Sciences
The Uniformed Services University of the Health Sciences, founded by an act of Congress in 1972, is the nation’s federal health sciences university and the academic heart of the Military Health System. USU students are primarily active duty uniformed officers in the Army, Navy, Air Force and Public Health Service who receive specialized education in tropical and infectious diseases, TBI and PTSD, disaster response and humanitarian assistance, global health, and acute trauma care. A large percentage of the university’s more than 5,200 physician and 1,000 advanced practice nursing alumni are supporting operations around the world, offering their leadership and expertise. USU also has graduate programs in biomedical sciences and public health committed to excellence in research, and in oral biology. The University's research program covers a wide range of clinical and other topics important to both the military and public health. For more information about USU and its programs, visit www.usuhs.edu.