



★ Mental Illness and Smoking

Adults with mental illness have a 70% higher rate of smoking than do adults with no mental illness (36% vs 21%), according to a collaborative report by the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA). Smoking is particularly high among younger adults, Native Americans, and Alaska Natives.

Adult smokers with mental illness are also less likely to quit smoking cigarettes. SAMHSA Administrator Pamela S. Hyde said, "Special efforts are needed to raise awareness about the burden of smoking among people with mental illness and to monitor progress in addressing this disparity." To that end, SAMHSA is partnering with the Smoking Cessation Leadership Center to develop a "portfolio of activities" designed to promote tobacco cessation efforts in behavioral health care. The activities include the 100 Pioneers for Smoking Cessation Campaign, which brings together policymakers and leaders in tobacco control, mental health, substance abuse, public health, and consumers to collaborate on an action plan.

The CDC report was based on data from SAMHSA's 2009 to 2011 National Survey on Drug Use and Health. Mental illness was defined as having a diagnosable mental, behav-

ioral, or emotional disorder, excluding developmental and substance use disorders, in the past 12 months. More information is available at <http://www.cdc.gov/vitalsigns>.

★ Hypervigilance and PTSD Risk

Soldiers who are preoccupied with the concept of threat when they enlist, or with avoiding threat just before they're deployed, are more likely to develop posttraumatic stress disorder (PTSD), according to a February 13, 2013, press release from the National Institutes of Health that revealed a study of 1,085 Israeli soldiers recruited and deployed between 2008 and 2010. According to the study, both threat vigilance and avoidance, particularly when combined with combat experience, account for more than one-third of PTSD symptoms that emerge later.

The researchers measured soldiers' threat attention at recruitment, just before deployment, and 6 months after deployment. Data from all 3 time points were collected for 487 soldiers. In the study, soldiers performed a computerized task that required paying attention to locations of neutral words, such as "data," or threatening words, such as "dead." A faster reaction time indicated increased threat vigilance; slower reaction times indicated threat avoidance.

The researchers also examined

how that response to threat might be modified by genes, such as a serotonin transporter gene previously linked to risk of PTSD. People with gene versions that recycle serotonin less efficiently may be overly vigilant in normal circumstances, but the low-efficiency versions may help them in dangerous conditions when heightened vigilance is actually a plus. Soldiers who saw combat had higher threat vigilance and more PTSD symptoms at the end of their first year of service. Although serotonin gene type had no direct effect on symptoms, the researchers say the low-efficiency version, combined with high vigilance, may have conferred some protection to soldiers in intense combat situations.

In another study, researchers used a technique called attention bias modification to help "rewire" participants' attention by repeatedly diverting it to neutral faces only. Offering soldiers a similar preventive intervention prior to deployment might help correct attention biases and reduce the risk of PTSD, the researchers suggest. Attention bias modification is based on the observation that people with anxiety unconsciously pay more attention to threatening things. But people switch their attention in milliseconds; to change such rapid behavior, the researchers say, you need to practice. ●