



HOME | ABOUT NIDA | WHAT'S NEW | NEWSROOM | PUBLICATIONS/PUBLICACIONES | FUNDING |

INFORMATION FOR: Students & Young Adults | Parents & Teachers | Researchers & Health Professionals |

COMMUNITY DRUG ALERT BULLETIN

Stress & Substance Abuse Community Drug Alert Bulletin

Stressful events can profoundly influence drug, alcohol, and tobacco use initiation, continuation, as well as relapse.

Dear Colleague;

Researchers have long recognized the strong correlation between stress and drug use, particularly relapse to drug use. In the wake of recent tragic events, our awareness of the role that stress can play in increasing ones' vulnerability to drug use is more important than ever. Exposure to stress is among the most common human experiences. It also is one of the most powerful triggers for relapse to substance abuse in addicted individuals, even after long periods of abstinence.

In an attempt to update you on current research about stress and its relationship to substance abuse, we have developed this Community Alert Bulletin. The fact that a disorder called Post-traumatic Stress Disorder (PTSD) may develop in people after exposure to a severe traumatic event—such as the terrorist attacks of September 11, 2001 is another reason we are issuing this Alert. PTSD is a diagnosable psychiatric disorder that is a known risk factor for substance abuse and addiction. Because the terrorist attacks were witnessed on television by millions of people across the world, it is likely that many of us may already know colleagues, friends, patients, or family members who may be experiencing behavioral and readjustment problems.

NIDA is encouraging its researchers to conduct more studies on the important topic of stress and drug abuse. We are already supporting a number of grantees who are specifically assessing the impact of these events on the citizens of New York City in respect to drug abuse and addiction prevalence. NIDA also is focusing more attention on developing science-based interventions to help people who may be more vulnerable to addiction better cope with stress.

We hope this information will be useful to you as you continue to work on drug abuse issues in your community. Identifying potential substance abuse problems early on and referring patients to professionals with expertise in drug abuse counseling and treatment will be beneficial to all involved. We all must focus on restoring our emotional well-being, developing healthy ways to manage stress, and avoiding turning to drugs or other substances to escape from the realities of the day.

Sincerely,
Glen R. Hanson, Ph.D., D.D.S.
Acting Director
National Institute on Drug Abuse

Stress - What is It?

Post-traumatic
Stress
Disorder
PTSD

corticotropin releasing factor
CRF
RELAPSE

- Stress is a term we all know and use often, but what does it really mean? It is hard to define because it means different things to different people. Stress is a normal reaction to life for people of all ages. It is caused by our body's instinct to protect itself from emotional or physical pressure or, in extreme situations, from danger.
- Stressors differ for each of us. What is stressful for one person may or may not be stressful for another; each of us responds to stress in an entirely different way. How a person copes with stress – by reaching for a beer or cigarette or by heading to the gym – also plays an important role in the impact that stress will have on our bodies.
- By using their own support systems, some people are able to cope effectively with the emotional and physical demands brought on by stressful and traumatic experiences. However, individuals who experience prolonged reactions to stress that disrupt their daily functioning may benefit from consulting with a trained and experienced mental health professional.

The Body's Response to Stress

- The stress response is mediated by a highly complex, integrated network that involves the central nervous system, the adrenal system, the immune system, and the cardiovascular system.
- Stress activates adaptive responses. It releases the neurotransmitter norepinephrine, which is involved with memory. This may be why people remember stressful events more clearly than they do nonstressful situations.
- Stress also increases the production of a hormone in the body known as corticotropin releasing factor (CRF). CRF is found throughout the brain and initiates our biological response to stressors. During all negative experiences, certain regions of the brain show increased levels of CRF. Interestingly, almost all drugs of abuse have also been found to increase CRF levels, which suggests a neurobiological connection between stress and drug abuse.
- Mild stress may cause changes that are useful. For example, stress can actually improve our attention and increase our capacity to store and integrate important and life-protecting information. But if stress is prolonged or chronic, those changes can become harmful.

Stress and Drug Abuse

- Stressful events may influence profoundly the use of alcohol or other drugs. Stress is a major contributor to the initiation and continuation of addiction to alcohol or other drugs, as well as to relapse or a return to drug use after periods of abstinence.
- Stress is one of the major factors known to cause relapse to smoking, even after prolonged periods of abstinence.
- Children exposed to severe stress may be more vulnerable to drug use. A number of clinical and epidemiological studies show a strong association between psychosocial stressors early in life (e.g., parental loss, child abuse) and an increased risk for depression, anxiety, impulsive behavior, and substance abuse in adulthood.

Stress, Drugs, and Vulnerable Populations

- Stressful experiences increase the vulnerability of an individual to relapse to drugs even after prolonged abstinence.
- Individuals who have achieved abstinence from drugs must continue to sustain their abstinence – avoiding

[More information on
Stress & Substance
Abuse](#)

environmental triggers, recognizing their psychosocial and emotional triggers, and developing healthy behaviors to handle life's stresses.

- A number of relapse prevention approaches have been developed to help clinicians address relapse. Treatment techniques that foster coping skills, problem-solving skills, and social support play a role in successful treatment.
- Physicians should be aware of what medications their patients are taking but should not discourage the use of medical prescriptions to help alleviate stress. Some people may need medications for stress-related symptoms or for treatment of depression and anxiety.

What is PTSD?

- Post-traumatic Stress Disorder (PTSD) is an anxiety disorder that can develop in some people after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened.
- Generally, PTSD has been associated with the violence of modern combat. However, many people other than combat soldiers are susceptible. PTSD can result from many kinds of tragic incidents in which the patient was a witness, victim, or survivor, including violent or personal attacks, natural or human-caused disasters, or accidents.
- Symptoms of PTSD can include re-experience of the trauma; emotional numbness; avoidance of people, places, and thoughts connected to the event; and arousal, which may include trouble sleeping, exaggerated startle response, and hypervigilance.
- PTSD can occur in people of any age, including children and adolescents.

PTSD and Substance Abuse

- An emerging body of research has documented a very strong association between PTSD and substance abuse. In most cases, substance use begins after the exposure to trauma and the development of PTSD, thus making PTSD a risk factor for drug abuse.
- Early intervention to help children and adolescents who have suffered trauma from violence or a disaster is critical. Children who witness or are exposed to a traumatic event and are clinically diagnosed with PTSD have a greater likelihood for developing later drug and/or alcohol use disorders.
- Of individuals with substance use disorders, 30 to 60 percent meet the criteria for comorbid PTSD.
- Patients with substance abuse disorders tend to suffer from more severe PTSD symptoms than do PTSD patients without substance use disorders.

Helping Those Who Suffer from PTSD and Drug Abuse

- Health care professionals must be alert to the fact that PTSD frequently co-occurs with depression, anxiety disorders, and alcohol or other substance abuse. Patients who are experiencing the symptoms of PTSD need support from physicians and health care providers.
- The likelihood of treatment success increases when these concurrent disorders are appropriately identified and treated as well.
- In some cases, medications such as the antidepressant sertraline (Zoloft™), have been shown to be helpful in treating patients who suffer from PTSD and substance use disorders.
- Some reports suggest that successful detoxification of these comorbid patients will likely require inpatient admission to permit vigorous control of withdrawal and PTSD-related arousal symptoms.
- Although there is no standardized, effective treatment developed for individuals with this disorder, studies

show that patients who suffer from PTSD can improve with cognitive behavioral therapy, group therapy, or exposure therapy, in which the patient gradually and repeatedly relives the frightening experience under controlled conditions to help him or her work through the trauma.

- Exposure therapy is thought to be one of the most effective ways to manage PTSD when it is conducted by a trained therapist. It has not yet been widely used with comorbid disorders, but recent studies suggest that some individuals with PTSD and comorbid cocaine addiction can be successfully treated with exposure therapy. Patients in a recent study who suffered from both disorders showed significant reductions in all PTSD symptoms and in overall cocaine use.
- Finally, support from family and friends can play an important role in recovery.

*Information from [NIDA's Community Epidemiology Work Group \(CEWG\)](#), a network of epidemiologists and researchers from 21 U.S. metropolitan areas who monitor drug use trends.

This publication may be reprinted without permission.

For free publications contact the [National Clearinghouse for Alcohol and Drug Information \(NCADI\)](#) at 1-800-729-6686 This page accessed 12230times since 3/6/02.

[Search](#) | [FAQs](#) | [Accessibility](#) | [Site Map](#) | [Help](#) | [NIDA Home](#) | [Privacy Policy](#) | [FOIA \(NIH\)](#) | [Employment](#) | [Print Version](#)



The National Institute on Drug Abuse (NIDA) is part of the [National Institutes of Health \(NIH\)](#), a component of the [U.S. Department of Health and Human Services](#). Questions? See our [Contact Information](#). *Last updated on Thursday, March 7, 2002.*