## Psychological Reactions to the National Terror-Alert System

Michael Eric Kramer, Ph.D.<sup>1</sup>, Adam D. Brown, B.A.<sup>1,2</sup>, Lisa Spielman, Ph.D.<sup>1</sup>, Cezar Giosan, Ph.D.<sup>1,2</sup>, & Michelanne Rothrock, B.A.<sup>1</sup>

This study represents an exploratory assessment of the psychological reactions to changes in the national terror-alert level on a small sample of New York City disaster-relief workers. Upgrades in terroralert levels in this context are seen as official, governmental communications that call attention to the possibility (and probability level) of future terrorist threats. While research suggests that alarms and warnings can serve to effectively prepare individuals for future threats (e.g. weather advisories), their duration and perceived communicator reliability and validity depend on a number of variables (Hovland, Janis, & Kelley, 1953; McGuire, 1967; Rogers and Mewborn, 1976; Zimbardo, 2003). Almost from the time of its inception, the Department of Homeland Security's terror-alert system has come under fire, among other things, failing to provide specific enough information about potential attacks and warnings to be meaningful indicators of threat and

The Id: Fall 2003-Vol 1

<sup>1:</sup> Department of Psychiatry, Weill Cornell Medical College, New York, USA 2. Department of Psychology, Graduate Faculty, New School University, New York, USA

Terror-Alerts 68

for failing to provide individuals with a concrete set of actions to take in response to heightened alert levels.

The current study investigated the hypothesis that these failings in the system will lead to an unnecessary increase in the psychiatric symptoms such as generalized anxiety, phobic avoidance (e.g. airplanes), increased hyperarousal (e.g. sleep disturbance, hypervigilance) and depression. To that end, data from 1.924 participants were obtained from a sample of World Trade Center (WTC) disaster-relief workers who completed both a clinician administered interview and self report measures. (Posttraumatic Stress Checklist for the World Trade Center disaster (PCL-WTC), Beck Depression Inventory (BDI) and the Brief Symptom Inventory (BSI) as part of a psychological screening program for acute and post-traumatic stress syndromes between May, 24, 2002 and August, 28, 2003 (98% male, 2% female; 66% White, 17% Black, 13% Hispanic, 1% Asian; 28% with PTSD or sub-threshold with PTSD). During this time period, there were nine shifts in the national terror-alert level (from "vellow" or elevated threat level to "orange" or high alert levels and back to "yellow", etc.). Although the measures and methods of the data collection was designed to assess for rates of post-traumatic stress psychopathology in its population, and not to measure changes in reported symptoms in response to alterations in the terror-alert levels, the nature of the data collection -between 10 and 20 disaster- relief workers completed the self-report research measures daily- allows for a unique look at day to day changes in the psychological experi69 Kramer et al.

ence and psychiatric symptoms in this population (for those with and without related psychopathology) as terror alert levels were raised and lowered.

Preliminary analyses (independent sample t-tests) reveal that the first two changes in terror-alert levels were raised and two changes from "elevated" to "high" alert levels (from September 10, 2002-September 24, 2002 and February 7, 2003-February 27, 2003) produced no significant changes in reported symptoms. However, a trend towards increased symptoms of physiological aroudisal, general and phobic anxiety, and depression were found in the next two elevations in the alert (March 17, 2003-April 16, 2003, May 20, 2003-May 30, 2003). Importantly, while the national terror-alert levels have shifted, the alert level in New York City has remained at "high" since the installation of the terror-alert system, and remains so to the present date. Therefore, changes observed in symptoms that are tied to changes in the national alert can be seen as reactions to the alarm itself, and not the actual threat the alarm represents. Further statistical analysis, including a time series analysis, will be conducted to measure more thoroughly the relationship between alert level changes and psychiatric symptomatology in this population.

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Terror-Alerts 70

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The Id: Fall 2003-Vol 1