It is suggested that acute stress stimulates oxytocin (OT) secretion, and that the exposure to enduring life-threatening experiences in childhood/adolescence has long lasting consequences regarding the stress system and connected functions. Furthermore, dysfunctions regarding adequate social engagement behaviors in adults who have been exposed to potentially traumatic experiences during childhood have been reported. OT has been associated with social engagement and may potentially mediate stress responses. However, OT responses to acute stress in individuals exposed to trauma have not been documented. The present study examined plasma levels of OT in adult victims of potentially traumatic experiences during childhood, and/or adolescence, when confronted to a psychosocial experimental stress, the Trier Social Stress Test (TSST). Method: Eighty subjects (n=26 women who had experienced episodes of child abuse, n=25 men and women healthy survivors of a cancer in childhood or adolescence, and 29 controls) were submitted to an experimental stress challenge (TSST). Results: there was a clear OT response to the psychosocial challenge. Subjects having experienced a childhood/adolescence life-threatening illness had higher mean levels of OT than both abused and control subjects. There was a moderate negative relationship between OT and salivary cortisol. Conclusions: by analyzing OT secretion under stress it may be possible to consolidate our understanding of the underlying mechanisms to the attachment system. It is interesting to find specific patterns of secretion of the OT hormone, which is deeply implicated in social functions, in individuals who have experienced adverse life events.