

## February-March, 2015 PILOTS Topic Alert

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Betancourt, T. S. (2015). "The intergenerational effect of war." *JAMA Psychiatry* 72(3): 199-200.

The exposure of children to violence is widespread. To end the march of violence from one generation to the next, health care professionals must recognize not only the immediate effects of trauma but also its long-term implications. This support is necessary not only in early childhood intervention programs but also in parenting programs that help violence-affected caregivers learn alternatives to aggression in child rearing, as well as initiatives to ensure that all members of the family are considered in the development of mental health and social services. It may be true that war is as old as humanity itself; however, the intergenerational transmission of violence does not have to be. [Adapted from Text]

Brent, D. A., N. M. Melhem, et al. (2015). "Familial pathways to early-onset suicide attempt: a 5.6-year prospective study." *JAMA Psychiatry* 72(2): 160-168.

**IMPORTANCE:** Suicide attempts are strong predictors of suicide, a leading cause of adolescent mortality. Suicide attempts are highly familial, although the mechanisms of familial transmission are not understood. Better delineation of these mechanisms could help frame potential targets for prevention. **OBJECTIVE:** To examine the mechanisms and pathways by which suicidal behavior is transmitted from parent to child. **DESIGN, SETTING, AND PARTICIPANTS:** In this prospective study conducted from July 15, 1997, through June 21, 2012, a total of 701 offspring aged 10 to 50 years (mean age, 17.7 years) of 334 clinically referred probands with mood disorders, 191 (57.2%) of whom had also made a suicide attempt, were followed up for a mean of 5.6 years. **MAIN OUTCOMES AND MEASURES:** The primary outcome was a suicide attempt. Variables were examined at baseline, intermediate time points, and the time point proximal to the attempt. Participants were assessed by structured psychiatric assessments and self-report and by interview measures of domains hypothesized to be related to familial transmission (eg, mood disorder and impulsive aggression). **RESULTS:** Among the 701 offspring, 44 (6.3%) had made a suicide attempt before participating in the study, and 29 (4.1%) made an attempt during study follow-up. Multivariate logistic regression revealed that proband suicide attempt was a predictor of offspring suicide attempt (odds ratio [OR], 4.79; 95% CI, 1.75-13.07), even controlling for other salient offspring variables: baseline history of mood disorder (OR, 4.20; 95% CI, 1.37-12.86), baseline history of suicide attempt (OR, 5.69; 95% CI, 1.94-16.74), and mood disorder at the time point before the attempt (OR, 11.32; 95% CI, 2.29-56.00). Path analyses were consistent with these findings, revealing a direct effect of proband attempt on offspring suicide attempt, a strong effect of offspring mood disorder at each time point, and impulsive aggression as a precursor of mood disorder.

**CONCLUSIONS AND RELEVANCE:** Parental history of a suicide attempt conveys a nearly 5-fold increased odds of suicide attempt in offspring at risk for mood disorder, even after adjusting for the familial transmission of mood disorder. Interventions that target mood disorder and impulsive aggression in high-risk offspring may attenuate the familial transmission of suicidal behavior. [Author Abstract]

Gearing, R. E., K. B. Brewer, et al. (2015). "Prevalence and correlates of depression, posttraumatic stress disorder, and suicidality in Jordanian youth in institutional care." *Journal of Nervous and Mental Disease* 203(3): 175-181.

Youth in institutional care centers have higher mental illness rates compared with community populations. Research examining mental illness among youth in institutional care in the Middle East is lacking. This study examines the prevalence and correlates of depression, posttraumatic stress disorder (PTSD), and suicidality of youth in institutional care in Jordan. Data were collected through youth interviews, staff-caregiver surveys, and administrative files. Prevalence rates and logistic regressions were used to model suicidality across depression, PTSD, and comorbid depression/PTSD, controlling for youth characteristics, case history, and social support factors. Institutionalized youth endorsed high rates of mental illness (45% depression, 24% PTSD, 17% depression/PTSD, 27% suicidality). The odds of suicidality for depressed youth were 3.6 times higher. Abuse was significant, with the odds of suicidality for abused youth 4 times higher. Elevated rates of mental illness and suicidality indicate the importance of addressing these needs within institutions. Developing institutional programs that foster peer relationships is recommended. [Author Abstract] **KEY WORDS:** child/adolescent; depression; PTSD; suicidality; international

Hirschtritt, M. E., P. C. Lee, et al. (2015). "Lifetime prevalence, age of risk, and genetic relationships of comorbid psychiatric disorders in Tourette syndrome." *JAMA Psychiatry*.

**IMPORTANCE:** Tourette syndrome (TS) is characterized by high rates of psychiatric comorbidity; however, few studies have fully characterized these comorbidities. Furthermore, most studies have included relatively few participants (<200), and none has examined the ages of highest risk for each TS-associated comorbidity or their etiologic relationship to TS. **OBJECTIVE:** To characterize the lifetime prevalence, clinical associations, ages of highest risk, and etiology of psychiatric comorbidity among individuals with TS. **DESIGN, SETTING, AND PARTICIPANTS:** Cross-sectional structured diagnostic interviews conducted between April 1, 1992, and December 31, 2008, of participants with TS (n = 1374) and TS-unaffected family members (n = 1142). **MAIN OUTCOMES AND MEASURES:** Lifetime prevalence of comorbid DSM-IV-TR disorders, their heritabilities, ages of maximal risk, and associations with symptom severity, age at onset, and parental psychiatric history. **RESULTS:** The lifetime prevalence of any psychiatric comorbidity among individuals with TS was 85.7%; 57.7% of the population had 2 or more psychiatric disorders. The mean (SD) number of lifetime comorbid diagnoses was 2.1 (1.6); the mean number was 0.9 (1.3) when obsessive-compulsive disorder (OCD) and attention-deficit/hyperactivity disorder (ADHD) were excluded, and 72.1% of the individuals met the criteria for OCD or ADHD. Other disorders, including

mood, anxiety, and disruptive behavior, each occurred in approximately 30% of the participants. The age of greatest risk for the onset of most comorbid psychiatric disorders was between 4 and 10 years, with the exception of eating and substance use disorders, which began in adolescence (interquartile range, 15-19 years for both). Tourette syndrome was associated with increased risk of anxiety (odds ratio [OR], 1.4; 95%CI, 1.0-1.9; P = .04) and decreased risk of substance use disorders (OR, 0.6; 95%CI, 0.3-0.9; P = .02) independent from comorbid OCD and ADHD; however, high rates of mood disorders among participants with TS (29.8%) may be accounted for by comorbid OCD (OR, 3.7; 95%CI, 2.9-4.8; P < .001). Parental history of ADHD was associated with a higher burden of non-OCD, non-ADHD comorbid psychiatric disorders (OR, 1.86; 95%CI, 1.32-2.61; P < .001). Genetic correlations between TS and mood (RhoG, 0.47), anxiety (RhoG, 0.35), and disruptive behavior disorders (RhoG, 0.48), may be accounted for by ADHD and, for mood disorders, by OCD.

**CONCLUSIONS AND RELEVANCE:** This study is, to our knowledge, the most comprehensive of its kind. It confirms the belief that psychiatric comorbidities are common among individuals with TS, demonstrates that most comorbidities begin early in life, and indicates that certain comorbidities may be mediated by the presence of comorbid OCD or ADHD. In addition, genetic analyses suggest that some comorbidities may be more biologically related to OCD and/or ADHD rather than to TS.

[Author Abstract]

Jackson Foster, L. J., B. Beadnell, et al. (2015). "Intergenerational pathways leading to foster care placement of foster care alumni's children." *Child and Family Social Work* 20(1): 72-82.

This study examined a path model that postulated intergenerational relationships between biological parent psychosocial functioning and foster care alumni mental health, economic status, and social support; and from these to the likelihood of children of foster care alumni being placed in foster care. The sample included 742 adults who spent time in foster care as children with a private foster care agency and who reported having at least one biological child. A full pathway was found between poorer father's functioning to greater alumni depression, which was in turn associated with negative social support, and then a greater likelihood of child out-of-home placement. Other parent to alumni paths were that poorer father functioning was associated with alumni anxiety and PTSD, and poorer mother's mental health was associated with PTSD; however, anxiety and PTSD were not implicated as precursors of foster care placement of the child. Findings support the need for increased practice and policy support to address the mental health needs of parents of children in or at risk of foster care, as well as the children themselves, as family history may have a lasting influence on quality of life, even when children are raised apart from biological parents. [Author Abstract] **KEY WORDS:** child welfare; foster care (family); mental health; mental health (parental)

March, S., J. A. Kenardy, et al. (2015). "Feasibility of a screening program for at-risk children following accidental injury." *Journal of Traumatic Stress* 28(1): 34-40.

Screening is recommended as a simple method for identifying those who should be monitored for risk following trauma. Effective methods for implementing large-scale screening programs are yet to be established. This study tested the feasibility and utility of a screening program

with hospitalized youth exposed to injury in 3 Australian hospitals. Eligible families (N = 1,134) were contacted and 546 children (48.0%) screened for risk of posttraumatic stress disorder (PTSD) at 1–2 weeks postinjury. There were 95 (17.4%) children whose screen result was at risk. A rescreening phase was introduced during the study, with 68 children completing the rescreen at 4–6 weeks postinjury, and 26 (38.2% of those rescreened) still at risk. Of those initially screened, 29 (5.3%) completed diagnostic assessments, 21 (3.8%) were diagnosed with partial or full PTSD, and 17 (3.1%) commenced treatment. Screening was successful at identifying and reaching children with PTSD, but the response rate was lower than expected, which limited the utility of the program. The addition of a rescreening phase demonstrated that not all at-risk children required intervention. These findings replicate previous studies that have shown natural remission in PTSD symptoms and highlight the potential for rescreening as part of a watchful waiting approach. [Author Abstract]

Mels, C., I. Derluyn, et al. (2015). "Coping behaviours and post-traumatic stress in war-affected eastern Congolese adolescents." *Stress and Health* 31(1): 5-12.

This study explores coping strategies used by war-affected eastern Congolese adolescents across age and sex, and the association between post-traumatic stress symptoms and engagement and disengagement coping. Cross-sectional data were collected in 11 secondary schools across four areas in the Ituri province, Democratic Republic of Congo. A total of 952 pupils (45.3% girls, 54.7% boys) aged 13-21 years (M = 15.83, standard deviation = 1.81) participated in self-report assessment, using instruments that were either specifically developed (Adolescent Complex Emergency Exposure Scale, assessing traumatic exposure), validated (Impact of Event Scale - Revised, assessing post-traumatic stress symptoms) or reviewed (Kidcope, assessing coping strategies) for the study population. Reported coping strategies varied with age, and boys more frequently reported problem solving and resignation as compared with girls. Disengagement coping was associated with lower symptom scores in younger adolescent girls, as was the interaction effect between engagement and disengagement coping. We conclude that disengagement coping is not necessarily a maladaptive reaction to stressful events in war-affected situations and that future research should aim to better understand the heterogeneous patterns of stress and coping responses, including the role of factors such as the nature and appraisal of stressors, available resources for coping and cultural preferences. [Author Abstract] KEY WORDS: war; PTSD; coping strategies; adolescents; mental health

Miller-Graff, L. E. and K. H. Howell (2015). "Posttraumatic stress symptom trajectories among children exposed to violence." *Journal of Traumatic Stress* 28(1): 17-24.

Little research has examined the developmental course of posttraumatic stress symptoms (PTSS) in children. The current study aimed to identify developmental trajectories of PTSS in childhood and to examine predictors of symptom presentation in 1,178 children from the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN) studies, a consortium of studies focusing on the causes and effects of child maltreatment. Most children had a history of documented reports with Child Protective Services (CPS) and all were identified as living in high-risk

environments. Using group-based trajectory modeling, 3 unique developmental trajectories were identified: Resilient, Clinical-Improving (PTSS in the clinical range at baseline then declining over time), and Borderline-Stable (chronically subclinical PTSS). Children in the Clinical-Improving group were more likely than children in the Resilient group to have reports of physical abuse (RRR = 1.76), emotional abuse (RRR = 2.55), neglect (RRR = 1.57), and exposure to violence at home and in the community (RRR = 1.04). Children in the Borderline-Stable group were more likely than children in the Resilient group to have a CPS history of neglect (RRR = 2.44) and exposure to violence at home and in the community (RRR = 1.04). Many children living in high-risk environments exhibit resilience to PTSS, but exposure to witnessed violence and neglect appear to put children at chronic risk for poor adjustment. These children may require more intensive, integrated clinical services that attend to multiple adverse experiences. [Author Abstract]

Nash, W. P., A. M. Boasso, et al. (2015). "Posttraumatic stress in deployed marines: prospective trajectories of early adaptation." *Journal of Abnormal Psychology* 124(1): 155-171.

We examined the course of PTSD symptoms in a cohort of U.S. Marines (N = 867) recruited for the Marine Resiliency Study (MRS) from a single infantry battalion that deployed as a unit for 7 months to Afghanistan during the peak of conflict there. Data were collected via structured interviews and self-report questionnaires 1 month prior to deployment and again at 1, 5, and 8 months postdeployment. Second-order growth mixture modeling was used to disaggregate symptom trajectories; multinomial logistic regression and relative weights analysis were used to assess the role of combat exposure, prior life span trauma, social support, peritraumatic dissociation, and avoidant coping as predictors of trajectory membership. Three trajectories best fit the data: a low-stable symptom course (79%), a new-onset PTSD symptoms course (13%), and a preexisting PTSD symptoms course (8%). Comparison in a separate MRS cohort with lower levels of combat exposure yielded similar results, except for the absence of a new-onset trajectory. In the main cohort, the modal trajectory was a low-stable symptoms course that included a small but clinically meaningful increase in symptoms from predeployment to 1 month postdeployment. We found no trajectory of recovery from more severe symptoms in either cohort, suggesting that the relative change in symptoms from predeployment to 1 month postdeployment might provide the best indicator of first-year course. The best predictors of trajectory membership were peritraumatic dissociation and avoidant coping, suggesting that changes in cognition, perception, and behavior following trauma might be particularly useful indicators of first-year outcomes. [Author Abstract] KEY WORDS: military; trajectory; PTSD; dissociation; coping

Pietrzak, R. H., L. A. Averill, et al. (2015). "Amygdala-hippocampal volume and the phenotypic heterogeneity of posttraumatic stress disorder: a cross-sectional study [letter]." *JAMA Psychiatry*.

The amygdala and hippocampus have been implicated consistently in the pathophysiology of posttraumatic stress disorder (PTSD). While several studies have observed reduced hippocampal volume in PTSD, studies of amygdala volume and PTSD have been mixed. In addition to method differences, one reason for these mixed results is that most structural magnetic resonance imaging

studies in PTSD have treated PTSD as a homogeneous entity instead of considering how amygdala volume may relate to its heterogeneous phenotypic expression. Confirmatory factor analytic studies have revealed that PTSD is best represented by 5 symptom clusters: reexperiencing, avoidance, numbing, dysphoric arousal (eg, sleep difficulties), and anxious arousal (eg, hypervigilance). To our knowledge, no study has evaluated the relation between amygdala and hippocampal volume and this contemporary model of PTSD. Here, we evaluated these associations in combat veterans. [Author Abstract]

Poulsen, K. M., B. M. C. McDermott, et al. (2015). "School-based psychological screening in the aftermath of a disaster: Are parents satisfied and do their children access treatment?" *Journal of Traumatic Stress* 28(1): 69-72.

This study investigated parents' satisfaction with postdisaster school-based screening and whether satisfaction was related to follow-through with screening recommendations. From among 1,268 there were 224 children, ages 7-18 years ( $M = 10.97$ ,  $SD = 2.44$  years) screened for emotional distress 4 months after a flood and 130 parents who completed the screening evaluation. Of the 44 children who showed severe emotional distress, less than 50% of their parents reported concerns and only 29.5% had sought assistance. Following screening, 86.7% of these children completed treatment. Overall satisfaction ratings by parents were high, with 99.2% very or mostly satisfied. [Author Abstract]

Roberts, A. L., J. C. Agnew-Blais, et al. (2015). "Posttraumatic stress disorder and incidence of type 2 diabetes mellitus in a sample of women: a 22-year longitudinal study." *JAMA Psychiatry* 72(3): 203-210.

**IMPORTANCE:** Posttraumatic stress disorder (PTSD) is a common, debilitating mental disorder that has been associated with type 2 diabetes mellitus (T2D) and its risk factors, including obesity, in cross-sectional studies. If PTSD increases risk of incident T2D, enhanced surveillance in high-risk populations may be warranted. **OBJECTIVE:** To conduct one of the first longitudinal studies of PTSD and incidence of T2D in a civilian sample of women. **DESIGN, SETTING, AND PARTICIPANTS:** The Nurses' Health Study II, a US longitudinal cohort of women ( $N = 49\ 739$ ). We examined the association between PTSD symptoms and T2D incidence over a 22-year follow-up period. **MAIN OUTCOMES AND MEASURES:** Type 2 diabetes, self-reported and confirmed with self-report of diagnostic test results, symptoms, and medications, a method previously validated by physician medical record review. Posttraumatic stress disorder was assessed by the Short Screening Scale for DSM-IV PTSD. We examined longitudinal assessments of body mass index, smoking, alcohol intake, diet quality, physical activity, and antidepressant use as mediators of possible increased risk of T2D for women with PTSD. The study hypothesis was formulated prior to PTSD ascertainment. **RESULTS:** Symptoms of PTSD were associated in a dose-response fashion with T2D incidence (1-3 symptoms: hazard ratio, 1.4 [95% CI, 1.2-1.6]; 4 or 5 symptoms; hazard ratio, 1.5 [95% CI, 1.3-1.7]; 6 or 7 symptoms: hazard ratio, 1.8 [95% CI, 1.5-2.1]). Antidepressant use and a higher body mass index associated with PTSD accounted for nearly half of the increased risk of T2D for women with PTSD.

Smoking, diet quality, alcohol intake, and physical activity did not further account for increased risk of T2D for women with PTSD. **CONCLUSIONS AND RELEVANCE:** Women with the highest number of PTSD symptoms had a nearly 2-fold increased risk of T2D over follow-up than women with no trauma exposure. Health professionals treating women with PTSD should be aware that these patients are at risk of increased body mass index and T2D. Comprehensive PTSD treatment should be expanded to address the health behaviors that contribute to obesity and chronic disease in affected populations. [Author Abstract]

Simonetti, J. A., J. L. Mackelprang, et al. (2015). "Psychiatric comorbidity, suicidality, and in-home firearm access among a nationally representative sample of adolescents." *JAMA Psychiatry* 72(2): 152-159.

**IMPORTANCE:** Suicide is the second leading cause of death among US adolescents, and in-home firearm access is an independent risk factor for suicide. Given recommendations to limit firearm access by those with mental health risk factors for suicide, we hypothesized that adolescents with such risk factors would be less likely to report in-home firearm access. **OBJECTIVES:** To estimate the prevalence of self-reported in-home firearm access among US adolescents, to quantify the lifetime prevalence of mental illness and suicidality (ie, suicidal ideation, planning, or attempt) among adolescents living with a firearm in the home, and to compare the prevalence of in-home firearm access between adolescents with and without specific mental health risk factors for suicide. **DESIGN, SETTING, AND PARTICIPANTS:** Cross-sectional analysis of data from the National Comorbidity Survey-Adolescent Supplement, a nationally representative survey of 10 123 US adolescents (age range, 13-18 years) who were interviewed between February 2001 and January 2004 (response rate 82.9%). **EXPOSURES:** Risk factors for suicide, including a history of any mental health disorder, suicidality, or any combination of the 2. **MAIN OUTCOMES AND MEASURES:** Self-reported access to a firearm in the home. **RESULTS:** One in three respondents (2778 [29.1%]) of the weighted survey sample reported living in a home with a firearm and responded to a question about firearm access; 1089 (40.9%) of those adolescents reported easy access to and the ability to shoot that firearm. Among adolescents with a firearm in home, those with access were significantly more likely to be older (15.6 vs 15.1 years), male (70.1% vs 50.9%), of non-Hispanic white race/ethnicity (86.6% vs 78.3%), and living in high-income households (40.0% vs 31.8%), and in rural areas (28.1% vs 22.6%) ( $P < .05$  for all). Adolescents with firearm access also had a higher lifetime prevalence of alcohol abuse (10.1% vs 3.8%,  $P < .001$ ) and drug abuse (11.4% vs 6.9%,  $P < .01$ ) compared with those without firearm access. In multivariable analyses, adolescents with a history of mental illness without a history of suicidality (prevalence ratio [PR], 1.13; 95% CI, 0.98-1.29) and adolescents with a history of suicidality with or without a history of mental illness (PR, 1.20; 95% CI, 0.96-1.51) were as likely to report in-home firearm access as those without such histories. **CONCLUSIONS AND RELEVANCE:** Adolescents with risk factors for suicide were just as likely to report in-home firearm access as those without such risk factors. Given that firearms are the second most common means of suicide among adolescents, further attention to developing and implementing evidence-based strategies to decrease firearm access in this age group is warranted. [Author Abstract]

Van den Berg, D. P. G., P. A. J. M. De Bont, et al. (2015). "Prolonged exposure vs eye movement desensitization and reprocessing vs waiting list for posttraumatic stress disorder in patients with a psychotic disorder: a randomized clinical trial." *JAMA Psychiatry* 72(3): 259-267.

**IMPORTANCE:** The efficacy of posttraumatic stress disorder (PTSD) treatments in psychosis has not been examined in a randomized clinical trial to our knowledge. Psychosis is an exclusion criterion in most PTSD trials. **OBJECTIVE:** To examine the efficacy and safety of prolonged exposure (PE) therapy and eye movement desensitization and reprocessing (EMDR) therapy in patients with psychotic disorders and comorbid PTSD. **DESIGN, SETTING, AND PARTICIPANTS:** A single-blind randomized clinical trial with 3 arms (N = 155), including PE therapy, EMDR therapy, and waiting list (WL) of 13 outpatient mental health services among patients with a lifetime psychotic disorder and current chronic PTSD. Baseline, posttreatment, and 6-month follow-up assessments were made. **INTERVENTIONS:** Participants were randomized to receive 8 weekly 90-minute sessions of PE (n = 53), EMDR (n = 55), or WL (n = 47). Standard protocols were used, and treatment was not preceded by stabilizing psychotherapeutic interventions. **MAIN OUTCOMES AND MEASURES:** Clinician-rated severity of PTSD symptoms, PTSD diagnosis, and full remission (on the Clinician-Administered PTSD Scale) were primary outcomes. Self-reported PTSD symptoms and posttraumatic cognitions were secondary outcomes. **RESULTS:** Data were analyzed as intent to treat with linear mixed models and generalized estimating equations. Participants in the PE and EMDR conditions showed a greater reduction of PTSD symptoms than those in the WL condition. Between-group effect sizes were 0.78 (P < .001) in PE and 0.65 (P = .001) in EMDR. Participants in the PE condition (56.6%; odds ratio [OR], 3.41; P = .006) or the EMDR condition (60.0%; OR, 3.92; P < .001) were significantly more likely to achieve loss of diagnosis during treatment than those in the WL condition (27.7%). Participants in the PE condition (28.3%; OR, 5.79; P = .01), but not those in the EMDR condition (16.4%; OR, 2.87; P = .10), were more likely to gain full remission than those in the WL condition (6.4%). Treatment effects were maintained at the 6-month follow-up in PE and EMDR. Similar results were obtained regarding secondary outcomes. There were no differences in severe adverse events between conditions (2 in PE, 1 in EMDR, and 4 in WL). The PE therapy and EMDR therapy showed no difference in any of the outcomes and no difference in participant dropout (24.5% in PE and 20.0% in EMDR, P = .57). **CONCLUSIONS AND RELEVANCE:** Standard PE and EMDR protocols are effective, safe, and feasible in patients with PTSD and severe psychotic disorders, including current symptoms. A priori exclusion of individuals with psychosis from evidence-based PTSD treatments may not be justifiable. **TRIAL REGISTRATION:** isrctn.com Identifier: ISRCTN79584912 [Author Abstract]

Williams, J. L., A. A. Rheingold, et al. (2015). "Associations between motor vehicle crashes and mental health problems: data from the National Survey of Adolescents-Replication." *Journal of Traumatic Stress* 28(1): 41-48.

Motor vehicle crashes (MVCs) are a leading cause of physical injuries and mortality among children and adolescents in the United States. The purpose of this study was to examine associations between having an MVC and mental health outcomes, including posttraumatic stress disorder (PTSD), depression, and drug and alcohol misuse in a nationally representative sample of

adolescents. A sample of 3,604 adolescents, aged 12-17 years, was assessed as part of the 2005 National Survey of Adolescents-Replication (NSA-R) study. Data were weighted according to the 2005 U.S. Census estimates. Within this sample, 10.2% of adolescents reported having at least 1 serious MVC. The prevalence of current PTSD and depression among adolescents having an MVC was 7.4% and 11.2%, respectively. Analyses revealed that an MVC among adolescents aged 15 years and younger was independently associated with depression (OR = 2.17) and alcohol abuse (OR = 2.36) after adjusting for other risk factors, including a history of interpersonal violence. Among adolescents aged 16 years and older, an MVC was associated only with alcohol abuse (OR = 2.08). This study was the first attempt to explore adverse mental health outcomes associated with MVCs beyond traumatic stress symptoms among adolescents in a nationally representative sample. [Author Abstract]