

reviewing transcripts, a codebook will be developed and used to analyze the data using Atlas t.i. Coding will be done independently and intercoder reliability will be assessed.

**Results** Re-occurring themes in the data analysis will inform the significance of social supports and what social supports are available to this population. Data collection is underway and preliminary study results will be available by April 2021.

**Conclusions** This research will inform what healthy relationships are supporting long-term recovery and appropriate parenting practices that could prevent child injury and abuse as well as increase permanency outcomes.

## Transportation safety

### 0098 COMMUNITY ENGAGEMENT AND THE DEVELOPMENT OF A RURAL ROAD SAFETY CAMPAIGN

<sup>1</sup>C Hamann, <sup>2</sup>E Daly, <sup>2</sup>N Askelson, <sup>3</sup>L Schwab-Reese, <sup>1</sup>C Peek-Asa. <sup>1</sup>University of Iowa Injury Prevention Research Center, Iowa City, USA; <sup>2</sup>University of Iowa, Iowa City, USA; <sup>3</sup>Purdue University, West Lafayette, USA

10.1136/injuryprev-2021-SAVIR.74

**Statement of purpose** Evaluation of community engagement in the development and dissemination of a rural roadway safety campaign.

**Methods/Approach** We implemented ‘We’re On This Road Together,’ a health communication campaign that targeted rural drivers’ interactions with farm vehicles and had three main messages: Slow Down, Leave More Space, and Avoid Passing. Campaign development and implementation was guided by a community advisory board (CAB) who gave input and direction on campaign message design and dissemination at monthly meetings. They also led campaign activities (hanging banners, distributing swag-totes, car air fresheners, etc.).

To guide our future collaborations with CABs, we conducted in-depth, semi-structured telephone interviews with CAB members (n=8) in the summer of 2020. Interviews were recorded and audio files were transcribed by a third-party service. After transcription, a research team member coded the interview transcripts. Codes were then organized by common themes: 1) overall experience, 2) responsibilities & commitment, 3) perceived campaign success, 4) resources needed for project implementation, and 5) recommendations for improvement.

**Results** Interview length averaged 25 minutes (range: 16–41). CAB members reported overwhelmingly positive experiences, reasonable time commitment, and successful format and frequency of communication. They viewed the overall project a success and valued our team’s community engagement efforts. However, the CAB had recommendations for improving campaign impact and reach, including adding online/social media campaign elements, expanding diversity of CAB membership (age, occupation/industry), and team-building activities to increase group bonding.

**Conclusions** Formation of a community advisory board was successful and critical in message development, implementation, and overall impact of our rural road safety campaign.

**Significance** This project demonstrates how to engage community advisors in development and delivery of a road safety campaign, which can be applied to other injury and violence prevention campaign activities.

## TBI/Concussion injuries

### 0099 VALIDITY OF ICD-10-CM DIAGNOSIS CODES FOR TRAUMATIC BRAIN INJURY IN VA ADMINISTRATIVE DATA

T Gilbert, H Holmer, K Carlson. VA Portland Health Care System, Portland, USA

10.1136/injuryprev-2021-SAVIR.75

**Statement of purpose** International Classification of Diseases, Tenth Revision (ICD-10), Clinical Modification codes are used to identify Veterans with traumatic brain injury (TBI) for surveillance and research. We examined the validity of using ICD-10 codes in Veterans Health Administration (VA) administrative data to identify Veterans with TBI.

**Methods/Approach** Clinician-confirmed TBI cases and non-cases after October 1, 2016 were extracted from the VA Comprehensive TBI Evaluation (CTBIE) database, a standardized TBI evaluation tool, and used as the criterion standard. Accessing VA administrative healthcare data, we compared three series of TBI-related ICD-10 codes recommended by the Centers for Disease Control and Prevention (CDC), the Defense and Veterans Brain Injury Center (DVBIC), and the VA TBI Program Office (VA) to clinician-confirmed TBI diagnoses. Sensitivity, specificity, and concordance were calculated. The validity of distinguishing TBI severity (mild versus moderate/severe), using DVBIC-recommended codes, was also examined.

**Results** Among 29,767 Veterans who received a CTBIE between 2016 and 2019, 20,670 (69.4%) received a clinician-confirmed TBI diagnosis and 20,760 (69.7%) had at least one TBI-related ICD-10 code assigned from any series. The CDC series had low sensitivity (40.8%) but high specificity (80.7%; 53.0% concordance). The DVBIC series had moderate sensitivity and specificity (71.7% and 63.9%, respectively; 69.3% concordance). The VA series had high sensitivity (81.8%), but moderate specificity (58.8%; 74.7% concordance). The sensitivity of DVBIC-recommended codes to distinguish TBI severity was high (83.4%), but specificity was low (21.5%; 76.4% concordance).

**Conclusion** We found that all three series of ICD-10 codes for TBI resulted in considerable misclassification of clinician-confirmed TBI cases and non-cases. The potential misclassification in studies using ICD-10 codes to examine TBI prevalence and outcomes among Veterans should inform surveillance and research efforts.

**Significance** Examining the validity of methods used for enumerating TBI cases allows researchers to interpret and translate their findings in the context of potential error.

## Social determinants of health

### 0101 COMMUNITY GREENING, FEAR OF CRIME, AND MENTAL HEALTH OUTCOMES IN FLINT, MICHIGAN

<sup>1</sup>C Burt, <sup>2</sup>M Kondo, <sup>3</sup>C Gong, <sup>3</sup>G Bushman, <sup>3</sup>C Wixom, <sup>4</sup>E South, <sup>3</sup>P Carter, R Cunningham <sup>3</sup>, <sup>5</sup>C Branas, <sup>6</sup>B Hohl, <sup>3</sup>M Zimmerman. <sup>1</sup>University of Connecticut, Storrs, USA; <sup>2</sup>US Forest Service, Philadelphia, USA; <sup>3</sup>University of Michigan, Ann Arbor, USA; <sup>4</sup>Perelman School of Medicine, University of Pennsylvania, Philadelphia, USA; <sup>5</sup>Columbia University, New York, USA; <sup>6</sup>Rutgers University – Camden, Camden, USA

10.1136/injuryprev-2021-SAVIR.76