# 2017 CSTE Annual Conference Roundtable Discussion

Implementing and Validating the Proposed ICD-10-CM Injury Matrices to Develop Injury Indicators
Holly Hedegaard, MD, MSPH (NCHS) and Renee Johnson, MSPH, RPT (NCIPC)

Wednesday, June 7, 2017: 1:00 PM - 1:45 PM, The Grove Hotel, Whitewater

### **Key Objective:**

To outline a plan to develop and test proposed injury indicators based on diagnoses or external causes using the injury matrices

## **Description of the roundtable:**

This roundtable discussion begins the conversation about how to use the proposed ICD-10-CM injury diagnosis matrix and the proposed ICD-10-CM external cause matrix to develop and test proposed injury indicators. While the matrices provide suggested groupings of ICD-10-CM codes for specific anatomic injuries (e.g., traumatic brain injury), injury mechanisms (e.g., fall, motor vehicle) and injury intents (e.g., suicide), additional development and testing is needed before an injury indicator can be finalized. Testing may involve such methods as medical record review to measure the sensitivity and positive predictive value of the proposed indicator or assessment of an indicator using dual coded data (i.e., the same record coded in both ICD-9-CM and ICD-10-CM). In this roundtable, we will begin to outline a plan for the development and testing of injury indicators using ICD-10-CM coded data. The plan will help inform the work of the CSTE Injury Subcommittee in the coming year.

#### **Session outline:**

History of Injury Indicators (10 min)
Indicator Process (10 min)
Input on desired future indicators (10 min)
Plans to develop and test ICD-10-CM Injury Indicators (15 min)

# **Current Injury Indicators (ICD-9-CM based)**

Indicators for hospitalizations and ED visits for:

Injuries due to:					
All Injuries					
Drowning					
Unintentional Fall					
Hip Fracture in Persons Aged 65 Years and Older					
Unintentional Fire-related					
Firearms					
Assault					
Motor Vehicle Traffic					
Poisoning					
Suicide Attempt					
Traumatic Brain Injury					

# Proposed ICD-10-CM External Cause Matrix for mechanism by intent of injury

Mechanism	Intent of Injury				
	Unintentional	Self-Harm	Assault	Undetermined	Legal Intervention/War
Cut/Pierce	X	Х	Х	Х	Х
Drowning/Submersion	Х	Х	Х	Х	
Fall	Х	Х	Х	Х	
Fire/Burn	Х	Х	Х	Х	Х
Fire/Flame	Х	Х	Х	Х	Х
Hot Object/Substance	Х	Х	Х	Х	
Firearm	Х	Х	Х	Х	Х
Machinery	Х				
All Transportation*	Х	Х	Х	Х	Х
Motor Vehicle-Traffic (MVT)	Х	Х	Х	Х	
MVT-Occupant	Х	Х	Х		
MVT-Motorcyclist	Х		•••		
MVT-Pedal cyclist	X				
MVT-Pedestrian	X		Х		
MVT-Other*	X				
MVT-Unspecified	Х			Х	
MV – Non-traffic*	X				
Pedal cyclist, Other	Х				
Pedestrian, Other	Х				
Other Land Transport*	Х	Х	Х		
Other Transport	X	Х	Х		Х
Natural/Environmental	X	Х	Х	Х	
Bites/Stings – nonvenomous*	Х		Х		
Bites/Stings – venomous*	Х	Х	Х	Х	
Other Natural/ Environmental	Х	Х	Х	Х	
Overexertion	Х				
Poisoning	X	Х	Х	Х	Х
Drug*	X	Х	Х	Х	
Non-Drug*	X	Х	Х	Х	Х
Struck by/against	X	Х	Х		Х
Suffocation	Х	Х	Х	Х	Х
Other Specified	Х	Х	Х	Х	Х
Other Specified –Child/Adult Abuse*			Х		
Other Specified – Foreign Body*	Х	•••			
Other Specified, Classifiable	Х	Х	Х	Х	Х
Other Specified, NEC		Х	Х	Х	Х
Unspecified	Х	Х	Х		Х

<sup>\*</sup> New mechanism category in the ICD-10-CM External Cause Matrix Note: "X" indicates relevant ICD-10-CM codes exist for this cell; "..." indicates there are no relevant ICD-10-CM codes for this cell