#### **Heat Related Illness v2**

## Query purpose:

To assist state, local, tribal, territorial, and federal public health practitioners in monitoring emergency department (ED) visits for heat-related illness.

# **Definition description:**

The Heat Related Illness v2 definition was designed to identify ED visits for heat-related illness. It is primarily based on <u>Heat Related Illness v1</u>, developed by the Council of State and Territorial Epidemiologists (CSTE) Heat Syndrome Workgroup in 2017, with small edits to terms and syntax. The guide, <u>Heat-Related Illness Syndrome Query: A Guidance Document for Implementing Heat-Related Illness Syndromic Surveillance in Public Health Practice</u>, provides further insight into the development and validation of the foundational v1 definition.

### **Version Enhancements:**

Compared with the Heat Related Illness v1 definition, this definition expands the use of ICD-9-CM; refines usage, includes or negates some specific codes; removes extraneous spaces around comma and "or" statements, and modifies chief complaint terms for inclusion and negation:

- No longer excludes the discharge diagnosis codes 1992, 6992 (misclassification related to 992 ICD-9-CM code), E900.1, E9001 (accidents due to excessive heat of man-made origin), T50.992A (misclassification related to 992 ICD9 code)
- Increases specificity of E900 codes to also include E900.1 and E900.9 and removes negation for E900.1
- Increases specificity of code X30 to X30.X
- Adds the inclusion term ,^HEAT[ -/\.;:]^,), to account for punctuation possibilities
- Excludes mentions of "apply" or "applying" in reference to therapeutic uses of heat or cold, the terms "heat condition", "heat failure", "wheat", "ETOH", "heat condition", "heat of the moment", and "contact with other heat and hot".
- Includes additional variations of sun stroke ("sun stroke" or "sun-str").

### How it works:

The Chief Complaint Discharge Diagnosis (CCDD) field is used to query discharge diagnosis codes and chief complaint term free text. The definition identifies visits with codes or terms indicating visits associated with heat-related illness (see Table 1, inclusions) while excluding visits that contain certain codes or terms (see Table 1, exclusions). The full guery syntax (see Table 2) is

also applied to the fields of Chief Complaint History, Admit Reason Combo, and Discharge Diagnosis.

(,^[;/]992[0-9];^,or,^[;/]992.[0-9];^,OR,^[;/]E900;^,OR,^[;/]E900.[09];^,OR,^[;/ [E900[09];^,OR,^[;/]T67^,OR,^[;/]X30.X^,OR,^[;/]X30X^,),OR, (,(,^HEAT,OR,^HEAT[-UN STROKE^,OR,^SUN-STR^,OR,^ TO HOT^,OR,^ TOO HOT^,OR,(,(,^HEET^,OR,^HOT^,),AND,(,^EXCESSIVE^,OR,^EXHAUST^,OR,^EXPOS^,OR,^FATIGUE ^,OR,^CRAMP^,OR,^STRESS^,OR,^IN CAR^,OR,^OUTSIDE^,OR,^PROSTRATION^,),),),ANDNOT,(,^ALLERG^,OR,^FEELING HOT^,OR,^FEELS HOT^,OR,^FELT HOT^,OR,(,^HOT^,AND,^SENSATION^,),OR,^HEAT SENSATION^,OR,^ INFLAM^,OR,(,^PAIN^, AND,(,^LIMB^,OR,^ARM^,OR,^SHOULDER^,OR,^ELBOW^,OR,^WRIST^,OR,^HAND^,OR,^LEG^,O R,^HIP^,OR,^GROIN^,OR,^THIGH^,OR,^KNEE^,OR,^ANKLE^,OR,^FOOT^,OR,^FEET^,OR,^BACK^, OR,^NECK^,OR,^FLANK^,OR,^RED^,OR,^JAW^,OR,^MOUTH^,OR,^TEETH^,OR,^TOOTH^,),),OR,^ RADIAT^,OR,^REDNESS^,OR,^SWELL^,OR,^SWOLLEN^,OR,^SURG^,OR,^POST OP^,OR,^IBUPROFEN^,OR,^IBUPROPHEN^,OR,^ALIEVE^,OR,^MOTRIN^,OR,^TYLENOL^,OR,^INJ  $UR^{\circ},OR^{\circ},TRAUMA^{\circ},OR^{\circ},(,(,^{HEAT},OR^{\circ},^{HEAT}[-/\.;:]^{\circ},),AND^{\circ},(,^{A})$ ICE^,OR,^APPLIED^,OR,^APPLY^,OR,^APPLYING^,OR,^TRIED^,OR,^USED^,OR,^USING^,OR,^COL D^,OR,^ RASH^,),),OR,^HEAT PACK^,OR,^HEATING PAD^,OR,^LUMBAGO^,OR,^RELIEF^,OR,^RESOLVE^,OR,^RELIEVE^,OR,^RELEIVE^,OR,^DENTAL^, OR,(,^HOT^,AND,(,^COLD^,OR,^COFF^,OR,^SHOWER^,),),OR,(,^ORAL^,AND,^SURG^,),OR,(,^SE NSITIV^,AND,(,^HEAT^,OR,^HOT^,),),OR,^HOT DOG^,OR,^HOT GREASE^,OR,^HOT EPPERS^,OR,^HOT TEA^,OR,^HEAT ACHE^,OR,^HEAT CONDITION^,OR,^HEATACHE^,OR,^HEAT ATTACK^,OR,^HEAT BEAT^,OR,^HEATBEAT^,OR,^HEAT FAILURE^,OR,^HEAT BURN^,OR,^HEATBURN^,OR,^HEAT FLUTTER^,OR,^HEAT RACING^,OR,^HEAT RATE^,OR,^HEATRATE^,OR,^HEATLH^,OR,^HEATH^,OR,^HEATTH^,OR,^HITTING HEAT^,OR,^PALPITATION^,OR,^CHEAT^,OR,^WHEAT^,OR,^HEATER^,OR,^HEATHER^,OR,^HEATIN G^,OR,^HOTEL^,OR,^LITHOTR^,OR,^METHOTR^,OR,^PHOTO^,OR,^PSYCHOTIC^,OR,^SHEATH^, OR, ^SHEET^, OR, ^SHOT^, OR, ^SUNDAY^, OR, ^THEAT^, OR, ^WHEAT^, OR, ^ACCIDENT^, OR, ^ALCOH OL^,OR,^ETOH^,OR,(,^BURN^,AND,^MOUTH^,),OR,^DISTRESS^,OR,^FEVER^,OR,^GETS HOT^,OR,^HEAT FLASH^,OR,^HOT FLASH^,OR,^HIVES^,OR,^HOT TUB^,OR,^NO HEAT^,OR,^OVEN^,OR,^SUICID^,OR,^HEAT OF THE MOMENT^,OR,^CONTACT WITH OTHER

HEAT AND HOT^,OR,^W92^,),)