## Dictionary for HSEES Public Use Data 2008-2009

This is the data dictionary for the 2008-2009 public use dataset of ATSDR's Hazardous Substances Emergency Events Surveillance System (HSEES).

## \*\*\*\*\*When printing this document it is recommended that the layout orientation be changed to landscape.\*\*\*\*

This document provides users with information for using the HSEES public use dataset. The data are related to events that occurred in the 13 HSEES states from 2008 through 2009. During the entire time period analyzed 6 states participated in HSEES: Louisiana, North Carolina, New York, Oregon, Utah, and Wisconsin. Colorado, Florida, Iowa, Michigan, Minnesota, Texas, and Wisconsin participated in 2008 and first half of 2009.

The public use dataset in text format contains tab delimited fields. The file contains 17,804 records, 86 variables, and a maximum record length of 774.

All data files contain one line of data for each event reported to HSEES. If the total number of chemicals in an event exceeds six, then only the first six are listed. A victim is defined as a person experiencing at least one documented adverse health effect (such as respiratory irritation or chemical burns) that likely resulted from the event and occurred within 24 hours of the release. The HSEES system does not identify the immediate cause of the adverse health effect other than the event itself. To determine the nature of victim injuries, state coordinators selected up to 7 entries among trauma, respiratory irritation, eye irritation, nausea or vomiting, heat stress, burns, skin irritation, dizziness or other CNS symptoms, and headache. Therefore, the number of injuries per event is likely to exceed the number of victims.

State coordinators could select up to two categories to describe the type of area where the event occurred, type of fixed-facility for fixed-facility events, and type of transportation for transportation events.

The Federal Information Processing Standard (FIPS) is used to represent county codes that are unique within each state. Pre-appended 2-digit FIPS state codes are provided to form the complete FIPS county code. Some events may lack the three digit county code because no county is listed for that particular event. A list of state and county FIPS codes for the United States can be found at the following website: <a href="http://www.epa.gov/enviro/html/codes/state.html">http://www.epa.gov/enviro/html/codes/state.html</a>.

Industry codes for the type of industry location for each HSEES event was assigned according to the 2002 North American Industry Classification System (NAICS) of the U.S. Census Bureau (Bureau of the Census). The industry code provided is a 2-3 digit NAICS code in the possible 6-digit hierarchy. Details regarding NAICS codes can be found at: <a href="http://www.census.gov/epcd/naics02/na

A description of chemical categories and the hierarchical assignment are provided (see Chemical Category Definitions document).

Variable	Position	Type	Length	Description	Value
RCD_ID	1	NUM	8	Sequential record number	A number
STATE	2	CHAR	2	State where event occurred	CO = Colorado
					FL=Florida
					IA = Iowa
					LA = Louisiana
					MI=Michigan
					MN = Minnesota
					NC = North Carolina
					NY = New York
					OR = Oregon
					TX = Texas
					UT = Utah
					WA = Washington
					WI = Wisconsin
EVNTCNTY	3	CHAR	30	County where event	Text string
				occurred	
FIPSCODE	4	CHAR	5	Five digit FIPS county code	See <a href="http://www.epa.gov/enviro/html/codes/state.html">http://www.epa.gov/enviro/html/codes/state.html</a>
EVNTTYPE	5	CHAR	1	Type of event	T = Transportation
					F = Fixed facility
THRTACTU	6	CHAR	1	Was the release actual or	1 = All actually released into the environment
				threatened	2 = All threatened to be released into the environment
					3 = Some actually and some threatened to be released
YEAR	7	CHAR	4	Year when event occurred	2008
					2009
SEASON	8	CHAR	1	Season when event	W = Winter (December, January, February)
				occurred	S = Spring (March, April, May)
					U = Summer (June, July, August)
					F = Fall (September, October, November)
WEEKDAY	9	CHAR	1	Portion of week when event	Y = Weekday (Monday - Friday)
				occurred	N = Weekend (Saturday – Sunday)
TIME	10	CHAR	1	Time range that event	D = 06:00 - 17:59  pm

				occurred	N = 18:00 - 05:59  pm
AREATYP1	11	CHAR	1	Description one of type of	0 = Undeveloped
				area where event occurred	1 = Industrial
					2 = Commercial
					3 = Residential
					4 = Agriculture
					A = Military facility/DOE/DOD
					C = Recreational
AREATYP2	12	CHAR	1	Description two of type of	(Codes are the same as AREATYP1)
				area where event occurred	
AREA_RES	13	CHAR	1	Residential area within 1/4	1 = Yes
				mile of event	2 = No
PRIM_FACT	14	CHAR	1	First contributing factor	2 = Equipment failure
					3 = Operator Error
					8 = Other
					G = Intentional
					H = Bad weather condition
					S = Illegal act
SEC_FACT	15	CHAR	1	Second contributing factor	1=Improper mixing
					2=Equipment failure
					3=Human error
					4=Improper filling, loading, or packing
					8=Other
					A=Performing maintenance
					B=System/process upset
					C=System start up and shutdown
					E=Power failure/electrical problems
					F=Unauthorized/improper dumping
					I=Vehicle or vessel collision
					J=Fire
					K=Explosion
					L=Overspray/misapplication P=Vehicle or vessel
					derailment/rollover/capsizing;

					Q=Illicit drug production related N=No secondary factor O=Loadshift
					R=Forklift puncture
FIXTYPE1	16	CHAR	1	Fixed facility type one	0 = Transportation within a fixed facility
					2 = Process vessel
				Pertains only to incidents in	3 = Piping
				the industry NAICS categories	4 = Material handling area
				21=Mining; 22=Utilities; or 31,	5 = Storage area above ground
				32, 33=Manufacturing	6 = Storage area below ground
					7 = Dump/waste area
					8 = Other
					A = Ancillary process equipment
					B = Transformer or capacitor
					C = Incinerator
					D = Heating/Cooling for building
					J = Laboratory
FIXTYPE2	17	CHAR	1	Fixed facility type two	(Codes are the same as FIXTYPE1)
TRNTYPE1	18	CHAR	1	Transportation type one	2 = Ground
					3 = Rail
					4 = Water
					5 = Air
					6 = Pipeline
TRNTYPE2	19	CHAR	1	Transportation type two	(Codes are the same as TRNTYPE1)
NAICS	20	CHAR	3	2-3 digit NAICS code for	NAICS – North American Industry Classification
				event location	System: available at
					http://www.census.gov/epcd/naics02/naicod02.htm
					or A98=Not an industry; A99=Not identified
NAICS_DESC	21	CHAR	200	NAICS description assigned	Census assigned code description: details available at
				to the NAICS 2-3 digit code	http://www.census.gov/epcd/naics02/naicod02.htm
ATHOMQTR	22	NUM	8	Number of people at home within ¼ mile of event	A number
LIVEQTR	23	NUM	8	Number of people living	A number

				within ¼ mile of event	
EVAC_ORD	24	CHAR	1	Evacuation ordered	Y = Yes
_					N = No
EVAC_PPL	25	NUM	8	Total number of people	A number
				evacuated as a result of the	
				event	
SHLT_ORD	26	CHAR	1	In-place sheltering ordered	Y=Yes
					N=No
DCON_SN	27	NUM	8	Number of uninjured people	A number
				decontaminated at the scene	
DCON_MF	28	NUM	8	Number of uninjured people	A number
				decontaminated at a	
				medical facility	
TOT_CHEM	29	NUM	8	Total number of chemicals	A number
				spilled	
SUB_CAT	30	CHAR	2	Substance category	(see Chemical Category Definitions)
					1 = Acid
					2 = Ammonia
					3 = Bases
					4 = Chlorine
					5 = Other inorganic substances category
					6 = Paints and dyes
					7 = Pesticides/Agricultural
					8 = Polychlorinated Biphenyls
					9 = Volatile Organic Compounds
					10 = Other substance category not listed 12 = Mixture across chemical categories
					A = Formulations
					B = Hetero-Organics
					C = Hydrocarbons
					D = Oxy-Organic
					E = Polymers
					88 = Multiple substance categories
					00 - Marapic substance categories

CHEM1	31	CHAR	70	Chemical name one	Text string
CHM_QCAT1	32	CHAR	1	Category for the amount of	B=1-<10
				Chemical #1	C=10-<100
					D=100-<500
					E=500-<1,000
					F=1,000-<10,000
					G=10,000+
CHM_UNIT1	33	CHAR	1	Unit of measure for the	1=Pounds
				amount of Chemical #1	2=Kilograms
					3=Gallons
					4=Liters
					5=Cubic feet
					6=Ounces by volume
					7=Milliliters
					8=Pico curies
					A=Tons
					B=Ounces by weight
					C=ppm (parts per million)
RELS1CHEM1	34	CHAR	1	First type of release for	1 = Spill
				Chemical #1	2 = Air Emission
					3 = Fire
					4 = Explosion
					7 = Threatened
RELS2CHEM1	35	CHAR	1	Second type of release for	(Codes are the same as RELS1CHEM1)
				Chemical #1	
CHEM2	36	CHAR	70	Chemical name two	Text string
CHM_QCAT2	37	CHAR	1	Category for the amount of	(Codes are the same as CHM_QCAT1)
				Chemical #2	
CHM_UNIT2	38	CHAR	1	Unit of measure for the	(Codes are the same as CHM_UNIT1)
				amount of Chemical #2	
RELS1CHEM2	39	CHAR	1	First type of release for	(Codes are the same as RELS1CHEM1)
				chemical #2	
RELS2CHEM2	40	CHAR	1	Second type of release for	(Codes are the same as RELS1CHEM1)

				chemical #2	
CHEM3	41	CHAR	70	Chemical name three	Text string
CHM_QCAT3	42	CHAR	1	Category for the amount of Chemical #3	(Codes are the same as CHM_QCAT1)
CHM_UNIT3	43	CHAR	1	Unit of measure for the amount of Chemical #3	(Codes are the same as CHM_UNIT1)
RELS1CHEM3	44	CHAR	1	First type of release for chemical #3	(Codes are the same as RELS1CHEM1)
RELS2CHEM3	45	CHAR	1	Second type of release for chemical #3	(Codes are the same as RELS1CHEM1)
CHEM4	46	CHAR	70	Chemical name four	Text string
CHM_QCAT4	47	CHAR	1	Category for the amount of Chemical #4	(Codes are the same as CHM_QCAT1)
CHM_UNIT4	48	CHAR	1	Unit of measure for the amount of Chemical #4	(Codes are the same as CHM_UNIT1)
RELS1CHEM4	49	CHAR	1	First type of release for chemical #4	(Codes are the same as RELS1CHEM1)
RELS2CHEM4	50	CHAR	1	Second type of release for chemical #4	(Codes are the same as RELS1CHEM1)
CHEM5	51	CHAR	70	Chemical name five	Text string
CHM_QCAT5	52	CHAR	1	Category for the amount of Chemical #5	(Codes are the same as CHM_QCAT1)
CHM_UNIT5	53	CHAR	1	Unit of measure for the amount of Chemical #5	(Codes are the same as CHM_UNIT1)
RELS1CHEM5	54	CHAR	1	First type of release for chemical #5	(Codes are the same as RELS1CHEM1)
RELS2CHEM5	55	CHAR	1	Second type of release for chemical #5	(Codes are the same as RELS1CHEM1)
CHEM6	56	CHAR	70	Chemical name six	Text string
CHM_QCAT6	57	CHAR	1	Category for the amount of Chemical #6	(Codes are the same as CHM_QCAT1)
CHM_UNIT6	58	CHAR	1	Unit of measure for the amount of Chemical #6	(Codes are the same as CHM_UNIT1)

RELS1CHEM6	59	CHAR	1	First type of release for chemical #6	(Codes are the same as RELS1CHEM1)
RELS2CHEM6	60	CHAR	1	Second type of release for chemical #6	(Codes are the same as RELS1CHEM1)
TOT_VICT	61	NUM	8	Total number of victims of the event	A number
AGE_RNG1	62	NUM	8	Number of victims between birth and 19 years of age	A number
AGE_RNG2	63	NUM	8	Number of victims between 20 and 64 years of age	A number
AGE_RNG3	64	NUM	8	Number of victims 65 years of age or older	A number
VICT_EMP	65	NUM	8	Number of employee victims	A number
VICT_RESP	66	NUM	8	Number of responder victims	A number
VICT_GP	67	NUM	8	Number of general public victims	A number
VICT_STD	68	NUM	8	Number of student victims	A number
INJ_TRA	69	NUM	3	Number of victims with trauma injuries	A number
INJ_RESP	70	NUM	3	Number of victims with respiratory system irritation	A number
INJ_EYE	71	NUM	3	Number of victims with eye irritation	A number
INJ_GASTRO	72	NUM	3	Number of victims with gastrointestinal problems	A number
INJ_HEAT	73	NUM	3	Number of victims with heat stress injuries	A number
INJ_BURN	74	NUM	3	Number of victims with burn injuries	A number
INJ_SKIN	76	NUM	3	Number of victims with skin irritation injuries	A number

INJ_CNS	77	NUM	3	Number of victims with dizziness or other CNS symptoms	A number
INJ_HACHE	78	NUM	3	Number of victims with headaches	A number
INJ_HRT	79	NUM	3	Number of victims with heart problems	A number
INJ_SOB	80	NUM	3	Number of victims with shortness of breath	A number
SEV_DTH	81	NUM	8	Number of victims where injury severity was deadly	A number
SEV_HOSPA	82	NUM	8	Number of victims where injury severity required treatment at hospital and admittance	A number
SEV_HOSPR	83	NUM	8	Number of victims where injury severity required treatment at hospital without being admitted or victim was transported to hospital for observation with no treatment	A number
SEV_NHOSP	84	NUM	8	Number of victims where injury severity required treatment on the scene (first aid); or victim was seen by a private physician within 24 hrs; or injuries were experienced within 24 hrs of the event and reported by an official	A number
VDCON_SN	85	NUM	8	Number of injured people decontaminated at the scene	A number

VDCON_MF	86	NUM	8	Number of injured people decontaminated at a medical facility	A number
VDCON_BOTH	87	NUM	8	Number of injured people decontaminated at both the scene and a medical facility	A number