

Dictionary for HSEES Public Use Data 2005-2007

This is the data dictionary for the 2005-2007 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 16 HSEES states from 2005 through 2007. During the entire time period analyzed 14 states participated in HSEES: Colorado, Florida, Iowa, Louisiana, Minnesota, North Carolina, New York, Oregon, Texas, Utah, Washington, and Wisconsin. Missouri participated in 2005 only; and, for New Jersey 2006 data includes July through December only.

The public use dataset in text format contains tab delimited fields. The file contains 24,039 records, 87 variables, and a maximum record length of 880.

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: <http://www.epa.gov/enviro/html/codes/state.html>.

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: <http://www.census.gov/epcd/naics02/naicod02.htm>

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

In 2005, the data collected in HSEES was slightly modified from previous years. A list of data modifications changes that users need to consider when combining the 2005-2007 HSEES data with the 2002-2004 HSEES data are provided at the end of this 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 MO = Missouri, 2005 only MS = Mississippi NC = North Carolina NJ = New Jersey, 2006 includes July-December only NY = New York OR = Oregon TX = Texas UT = Utah WA = Washington WI = Wisconsin
EVNTCNTY	3	CHAR	30	County where event occurred	Text string
FIPSCODE	4	CHAR	5	Five digit FIPS county code	See http://www.epa.gov/enviro/html/codes/state.html
EVNTTYPE	5	CHAR	1	Type of event	T = Transportation F = Fixed facility
THRTACTU	6	CHAR	1	Was the release actual or threatened	1 = All actually released into the environment 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	2002 2003 2004
SEASON	8	CHAR	1	Season when event occurred	W = Winter (December, January, February) S = Spring (March, April, May) U = Summer (June, July, August) F = Fall (September, October, November)

WEEKDAY	9	CHAR	1	Portion of week when event occurred	Y = Weekday (Monday – Friday) N = Weekend (Saturday – Sunday)
TIME	10	CHAR	1	Time range that event occurred	D = 06:00 – 17:59 pm N = 18:00 – 05:59 pm
AREATYP1	11	CHAR	1	Description one of type of area where event occurred	0 = Undeveloped 1 = Industrial 2 = Commercial 3 = Residential 4 = Agriculture A = Military facility/DOE/DOD C = Recreational
AREATYP2	12	CHAR	1	Description two of type of area where event occurred	(Codes are the same as AREATYP1)
AREA_RES	13	CHAR	1	Residential area within ¼ mile of event	1 = Yes 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

					<p>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</p>
FIXTYPE1	16	CHAR	1	<p>Fixed facility type one</p> <p>Pertains only to incidents in the industry NAICS categories 21=Mining; 22=Utilities; or 31, 32, 33=Manufacturing</p>	<p>0 = Transportation within a fixed facility 2 = Process vessel 3 = Piping 4 = Material handling area 5 = Storage area above ground 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</p>
FIXTYPE2	17	CHAR	1	Fixed facility type two	(Codes are the same as FIXTYPE1)
TRNTYPE1	18	CHAR	1	Transportation type one	<p>2 = Ground 3 = Rail 4 = Water 5 = Air 6 = Pipeline</p>
TRNTYPE2	19	CHAR	1	Transportation type two	(Codes are the same as TRNTYPE1)
NAICS	20	CHAR	3	2-3 digit NAICS code for event location	<p>NAICS – North American Industry Classification System: available at http://www.census.gov/epcd/naics02/naicod02.htm or A98=Not an industry; A99=Not identified</p>
NAICS_DESC	21	CHAR	200	NAICS description assigned to the NAICS 2-3 digit code	Census assigned code description: details available at 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 within ¼ mile of event	A number
EVAC_ORD	24	CHAR	1	Evacuation ordered	Y = Yes N = No
EVAC_PPL	25	NUM	8	Total number of people evacuated as a result of the event	A number
SHLT_ORD	26	CHAR	1	In-place sheltering ordered	Y=Yes N=No
DCON_SN	27	NUM	8	Number of uninjured people decontaminated at the scene	A number
DCON_MF	28	NUM	8	Number of uninjured people decontaminated at a medical facility	A number
TOT_CHEM	29	NUM	8	Total number of chemicals spilled	A number
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
CHEM1	31	CHAR	70	Chemical name one	Text string
CHM_QCAT1	32	CHAR	1	Category for the amount of Chemical #1	B=1-<10 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 amount of Chemical #1	1=Pounds 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 Chemical #1	1 = Spill 2 = Air Emission 3 = Fire 4 = Explosion 7 = Threatened
RELS2CHEM1	35	CHAR	1	Second type of release for Chemical #1	(Codes are the same as RELS1CHEM1)
CHEM2	36	CHAR	70	Chemical name two	Text string
CHM_QCAT2	37	CHAR	1	Category for the amount of Chemical #2	(Codes are the same as CHM_QCAT1)
CHM_UNIT2	38	CHAR	1	Unit of measure for the amount of Chemical #2	(Codes are the same as CHM_UNIT1)

RELS1CHEM2	39	CHAR	1	First type of release for chemical #2	(Codes are the same as RELS1CHEM1)
RELS2CHEM2	40	CHAR	1	Second type of release for chemical #2	(Codes are the same as RELS1CHEM1)
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	(Codes are the same as CHM_QCAT1)

				Chemical #6	
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	A number

				burn injuries	
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	A number

				an official	
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

Public Use Data File 2005-2007 – Things to consider due to HSEES changes in 2005-2007 relative to the 2002-2004 HSEES system and data file.

1. For 2005-2007, 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: <http://www.census.gov/epcd/naics02/naicod02.htm>. For 2002-2004, Industry codes for the type of industry responsible for each HSEES event were assigned according to the 1990 Industrial Classification System of the U.S. Census Bureau (Bureau of the Census). The industry classification system consists of 243 codes (see Industry Codes and documentation for 2002-2004 Public Use Data File).
2. FIXTYPE1 & FIXTYPE2 (two variables that capture information on the type of area of a fixed facility where the event occurred) Variables were restricted to events that occurred in the Mining (NAICS 2-digit=21), Utilities (NAICS 2-digit=22), or Manufacturing (NAICS 2-digit=31, 32 or 33) industries. Several categories used in 2002-2004 that do not pertain to these industries were excluded.
3. PRIM_FACT & SEC_FACT – In 2005-2007 events, state coordinators were asked to select a primary factor (PRIM_FACT) from a list of six choices and a secondary factor (SEC_FACT) from a list of 17 choices. Furthermore, the 2002-2004 category G='Intentional or Illegal act was split in 2005-2007 to G='Intentional' and S='Illegal act.'
4. CHM_UNIT -- Chemical unit category for parts per million (ppm) was added.
5. In 2005 codes were introduced to reflect either 'non-industry' events or events which lacked sufficient information to determine an associated industry. These codes were used in addition to the 2002 NAICS codes: A98=not an industry and A99=not identified.