# American Association of Poison Control Centers



# National Poison Data System (NPDS)

# **NPDS Coding Users' Manual**<sup>©</sup>

# Version 3.1

Approved by the AAPCC Board of Directors May 7, 2014

© 2014 American Association of Poison Control Centers

### TABLE OF CONTENTS

LIST OF ABBREVIATIONS
PURPOSE AND SCOPE
DATA COMPONENTS
NATIONAL POISON DATA SYSTEM (NPDS) 5   MEDICAL RECORD 5   SOFTWARE OPTIONS 5   NPDS TECHNICAL REQUIREMENTS 7   SUBSTANCE CODING HIERARCHY 7
FIELD DEFINITIONS
→ AGE10
→ AGE UNIT
→ ANIMAL TYPE12
→ CALL SITE CODE
→ CALL SUBCATEGORY15
→ CALL TYPE19
→ CALLER SITE
→ CASE NUMBER
→ CASE STATUS24
→ CENTER CODE (PRIVATE)25
→ CHRONICITY
→ CLINICAL EFFECT
→ CLINICAL EFFECT RELATEDNESS
→ CLINICAL EFFECT DURATION
→ EXPOSURE DURATION
→ EXPOSURE SITE
→ FINAL HEALTH CARE FACILITY40
→ FREE AREA
→ GENDER
→ GENERIC CODE
→ INDUSTRY CONTRACT CASE
→ INITIAL HEALTH CARE FACILITY46
→ INITIAL SPI CODE
→ LEVEL OF HCF CARE
→ LOCATION, CALLER
→ MANAGEMENT SITE

→ MEDICAL OUTCOME	54
→ NUMBER OF FOLLOW-UP CALLS	58
→ NUMBER OF PRODUCTS	59
→ OVERRIDE	60
→ PREGNANCY DURATION	61
→ PRIMARY CENTER CODE	62
→ PRODUCT CODE	65
→ REASON	67
→ RELATED CASE NUMBER	73
→ ROUTE	74
→ SCENARIO CATEGORY, SCENARIO ID	76
→ SPECIES	81
→ START DATE	82
→ STATE	83
	84
→SUBSTANCE FORMULATION	85
	86
→SUBSTANCE QUANTITY UNIT	87
→ SUBSTANCE SEQUENCE NUMBER	88
→ THERAPY	89
→ THERAPY OPTION	92
→ THERAPY RECOMMENDATION	93
→ WEIGHT	94
> VEAR	

### List of Abbreviations

The following is a list of abbreviations referenced in this document:

- AAPCC American Association of Poison Control Centers
- AMA Against Medical Advice
- CSPI Certified Specialist in Poison Information
- FTP File Transfer Protocol
- HCF Health Care Facility
- NPDS National Poison Data System
- PIP Poison Information Provider
- RPC Regional Poison Center
- SPI Specialist in Poison Information

### **Purpose and Scope**

The mission of the American Association of Poison Control Centers (AAPCC) is to actively advance the health care role and public health mission of their members through information, advocacy, education and research. AAPCC members are accredited regional poison centers who offer confidential medical advice at no cost to the end user in an effort to prevent and treat poison exposures. The National Poison Data System (NPDS), owned and operated by AAPCC, is a centralized data repository that captures case information reported to all regional poison centers and is a vital infrastructure of the association.

NPDS serves many purposes:

- 1) Assistance with identification and medical management of exposures
- 2) Development of evidence-based referral and treatment guidelines
- 3) Real-time toxicosurveillance
- 4) Product safety evaluations for pharmaceuticals and non-pharmaceuticals
- 5) Epidemiological studies
- 6) Public health information and education

This manual is intended to provide detailed information regarding the standardized structure, format and content of NPDS. This is the official manual of the AAPCC and its members. This manual should be considered proprietary information and is not to be shared outside of the association without expressed and written approval from AAPCC.

### **Data Components**

### National Poison Data System (NPDS)

The following instructions are provided to promote coding uniformity among regional poison centers participating in NPDS. Regional poison centers submitting data to NPDS are required to comply with these coding guidelines for all NPDS fields. Deviation from these definitions/instructions will produce inaccurate, biased or invalid data. No patient identifiers are provided to NPDS, thus patient confidentiality is maintained. To maximize coding accuracy, it is optimal that NPDS coding will be done by a staff member handling the call or other appropriately trained regional poison center personnel.

All NPDS data reported by the AAPCC during the year in which the exposures occurred is considered preliminary until the NPDS database for that year is locked. This is because it is possible that a regional poison center may update a case anytime during the year if new information is obtained. In the fall of each year the database for the previous calendar year is locked, and no additional changes are permitted. At that time the data for a year is considered locked.

### Medical Record

In addition to the encoded fields which are submitted to AAPCC, regional poison centers must also document each case through a narrative medical record which provides data sufficient to verify coded data fields and to allow quality assurance review of information obtained and provided. Guidelines for the narrative portion of the medical record are developed by each individual regional poison center; however retrieval of these records and submission of blinded copies may be required by AAPCC for quality assurance audits or requested for public health purposes. AAPCC recognizes that in many cases regional poison center narrative medical records are appropriately brief.

### Software Options

There are currently four commercially-available computerized options for collecting NPDS data. The vendors and their contact information for each of these products are listed below. AAPCC does not endorse any individual product, but supports the efforts of all four vendors to provide compatible and efficient data entry software.

CasePro<sup>®</sup> Contact: Alvin C. Bronstein MD, FACEP Medical Director, Rocky Mountain Poison Center 777 Bannock Street, MC0180 Denver, CO 80204 <u>Al.Bronstein@rmpdc.org</u> Phone: 303-389-1215

#### **DotLab**<sup>®</sup>

Contact: Terry S. Carlson, PharmD D.b.a. WBM Software 8417 N. Bond Street Fresno, CA 93720 tcarlson@calpoison.org Phone: 559-438-5542 www.wbmsoft.com

#### toxiCALL®

Contact: Thomas Neuman Computer Automation Systems, Inc. 7233 South Richfield Street Aurora, CO 80016 <u>Thomas Neuman@toxicall.com</u> Phone: 303-680-7774 Toll Free: 855-TOXICAL (855-869-4225) <u>www.toxicall.com</u> <u>support@toxicall.com</u>

#### **ToxSentry**<sup>®</sup>

Contact: Jay L. Schauben, PharmD, DABAT, FAACT Director, Florida/USVI Poison Information Center - Jacksonville Shands Jacksonville Medical Center 655 West 8th Street, Box C-23 Jacksonville, FL 32209 <u>schauben@poison.ufl.edu</u> Phone: 904-244-4465

Contact: Robert J. Geller, MD Director, Georgia Poison Control Center Hughes Spalding Children's Hospital, Grady Health System 50 Hurt Plaza, Suite 600 PO Box 26066 Atlanta, GA 30303 <u>RGeller@georgiapoisoncenter.org</u> Phone: 404-616-6652

Regional poison centers may develop alternative data collection software programs or systems, however it is the responsibility of the regional poison center and vendor to assure compatibility and compliance with NPDS requirements before these data are submitted to NPDS. In addition, each vendor is responsible for the costs of any changes or upgrades required by AAPCC.

#### NPDS Technical Requirements

The technical specifications for record layout and data model for NPDS is owned by AAPCC and maintained by AAPCC's NPDS development contractor.

#### Substance Coding Hierarchy

Product-specific substance coding is a valuable and unique characteristic in the NPDS system. Productspecific coding allows for early detection of public health issues, targeted exposure management guidelines, tracking of safety related to specific substances, ability to evaluate interventions or market changes, and enhanced toxicosurveillance.

The substance coding hierarchy is illustrated in Figure 1. The most specific level is *Product Code*. These codes identify a specific substance, often including the brand name or formulation (e.g. Clorox Bleach, Tylenol Extra Strength Caplets). The inventory of more than 380,000 Product Codes is found in PoisIndex® (Truven Health Analytics Inc., Greenwood Village, Colorado). Often, one case will report more than one substance. Therefore, multiple Product Codes may be identified for one case. While Product Code is not a required data field, it should be populated whenever possible to ensure the most appropriate exposure management and data accuracy.

The next layer of the substance coding hierarchy is *Generic Code*. Generic Code is a required data field that serves two purposes: 1) allows for groupings of related Product Codes (each Product Code is assigned to only one Generic Code) and 2) allows for general identification of a substance when the specific Product Code is not available. AAPCC maintains a copyrighted list of about 1000 Generic Codes. Examples of Generic Codes include Bleaches: Hypochlorite, Copperhead Envenomation, Benzodiazepines, Codeine, Marijuana and Albuterol.

Generic Codes are consolidated into approximately 170 *Minor Category* groupings. Each Generic Code is assigned to only one Minor Category. Examples of a Minor Category include Bleaches, Insecticides, Opioids, Antibodies, Anticonvulsants, Hormonal Products, and Diet Aids. Minor category designation is not an NPDS data field. Rather, it is strictly used to organize NPDS data output.

Related Minor Categories are then grouped into a broader *Major Category*. Examples of a Major Category include Alcohols, Cleaning Substances, Foreign Bodies/Toys/Miscellaneous, Analgesics, Antidepressants, Sedative/Hypnotics/Antipsychotics, Stimulants/Street Drugs, Vitamins and Veterinary Drugs. Major Category designation is not an NPDS data field. Like the Minor Category designation, it is strictly used to organize NPDS data output.

Finally, the highest level in the coding hierarchy is designation of a substance as a *Pharmaceutical* or *Non-Pharmaceutical* agent. Each Major Category is assigned as either Pharmaceutical or Non-Pharmaceutical. Like Major Category and Minor Category, Pharmaceutical/Non-Pharmaceutical designation is not an NPDS data field. Rather, it is strictly used to organize NPDS data output.





### **Field Definitions**

Each NPDS field is defined in the following pages. The fields are listed alphabetically.

Each field includes the full common name (Common Name - Long), the shortened version of the common name (Common Name – Short), the NPDS file field name, definition, coding options, additional detail and edits. Each of these specifications is defined in the template provided below:

→ <Common Name – Long>

Common Name – Short: <**Common Name – Short**> NPDS field name: <**NPDS file field name**>

#### **Definition:**

<provides full definition of the data field>

#### Coding Options:

<specifies valid options for response in either numerical or categorical format; provides guidance on how to make the most appropriate coding decisions>

#### Additional Detail:

<provides relevant information for the purpose of clarifying case coding, this may include guidance regarding how this field relates to others, specific case examples, expected challenges or other helpful information>

#### Edits:

<outlines the technical specifications of coding including valid inputs for this data field and, as appropriate, other related data fields>

Edits are applied to cases based on the following criteria. Unless otherwise specified, an edit applies to all closed, human and animal, exposures, regardless of the Override Flag value.

Legend of Edit Nomenclature:

Call Type

- (H) Human Exposure Edits:
  - Species = 1 Human
  - Call Type = 0 Exposure
- (A) Animal Exposure Edits
  - Species = 2 Animal
  - Call Type = 0 Exposure
- (I) Information Edits
  - Call Type <> Null and <> 0
- (H&A) Human and Animal Exposure Edits: default, unless otherwise specified
  - Call Type = 0 Exposure

#### Edit Type

(F) Fatal Edit – Fatal edits detect coding errors or incompatible data and lead to data rejection. Applied to all applicable cases - **default**, **unless otherwise specified** 

(NF) Nonfatal edit – Improbable but possible situations. Not applied to any case with Override Flag = Yes (1)

Status Type (C) Closed Case – **default, unless otherwise specified** (O&C) Open and Closed Case

### ➔ Age

Common Name – Short: Age NPDS field name: Age

#### **Definition:**

Numerical age of the patient.

#### **Coding Options:**

Age Value	Description
1-120	Actual age value
NULL	Actual age not available

Record the patient's actual age by inserting the numerical value in the *Age* field and the unit (i.e. years, months) in the *Age Unit* field.

Only integers (whole numbers) can be added, therefore the actual age should be rounded down to the nearest whole number (i.e. if  $3\frac{3}{4}$  years then round down to 3 years, if  $5\frac{1}{4}$  months then round to 5 months).

If actual age cannot be obtained, the *Age* field is not populated (NULL). In this instance, an estimated age should be obtained and recorded by selecting an age category in the *Age Unit* field.

#### Additional Detail:

Efforts should be made to obtain the most specific age possible. Both *Age* and *Age Unit* fields must be populated if recording actual age.

Code *Age* in days if child is <1 month old.

Code *Age* in months if child is between the age of 1 month and 23 months.

Code Age in years if patient is 2 years and older.

#### Edits:

Valid codes: 1-120 (integers only), or NULL. If *Age* value is specified, then *Age Unit* must be 15 - 17. If *Age Unit* = 15 then *Age* must be 1-120. If *Age Unit* = 16 then *Age* must be 1-23. (H) If *Age Unit* = 17 then *Age* must be 1-31. (H)

### → Age Unit

Common Name – Short: Age Unit NPDS field name: PaAgeUnit

#### **Definition:**

Age unit of patient.

#### **Coding Options:**

Age Unit Value	Description
1	≤5 years
2	6-12 years
3	Teen
4	20s
5	30s
6	40s
7	50s
8	60s
9	70s
10	80s
11	≥90
12	Unknown child (≤19 years)
13	Unknown adult (≥20 years)
14	Unknown age
15	Years
16	Months
17	Days

Code an actual age unit (i.e. years, months, days). If actual age cannot be obtained, select the appropriate age category using the ranges listed.

Both Age and Age Unit fields must be populated if recording actual age.

Only use *Age Unit* = Days if child is <1 month old.

Only use *Age Unit* = Months if child is between the age of 1 month and 23 months.

Use *Age Unit* = Years if patient is 2 years and older.

#### Additional Detail:

Efforts should be made to obtain the most specific age possible.

Choose  $\leq$ 5 years, 6-12 years, Teen or one of the decade categories only if you are confident you are accurate. Otherwise, choose unknown child ( $\leq$ 19 years), unknown adult ( $\geq$ 20 years), or unknown age.

#### Edits:

For estimated ages use *Age Unit* codes 1 - 14; for actual ages use *Age Unit* codes 15 - 17. If *Age* is NULL, then *Age Unit* must be 1-14. (H) If *Age* is specified, then *Age Unit* must be 15-17.

### ➔ Animal Type

Common Name – Short: *Animal Type* NPDS field name: *PaAnimalTypeID* 

#### Definition:

Type of animal involved when **Species** is animal.

#### **Coding Options:**

Animal Type Value	Description
1	Cat
2	Dog
3	Bird (includes: parrots, parakeets, chickens, turkeys, etc.)
4	Aquatic ( <i>includes:</i> fish, marine animals)
5	Cow
6	Horse
7	Rodent/Lagomorph ( <i>includes:</i> rabbits, rats, mice, squirrels, porcupines, beavers, gerbils, hamsters, etc.)
8	Sheep/Goat
9	Other

#### Additional Detail:

None

#### Edits:

Valid codes: NULL, 1-9. If **Species** = 1 (human), then Animal Type must be NULL. (H) If **Species** = 2 (animal), then **Animal Type** must be 1-9. (A)

### → Call Site Code

Common Name – Short: Call Site Code NPDS field name: CallerSiteCode

#### **Definition:**

The more specific site of a caller at the time of the initial call when the *Caller Site* is Health Care Facility (HCF) or Other.

#### **Coding Options:**

One of the following codes must be used when *Caller Site* = Health Care Facility (HCF):

<i>Call Site Code</i> Value	Description	
0001	Acute care l	hospital and hospital-based emergency department
		Reserved for individual RPC use if RPC chooses to develop site-
	0002-0999	specific codes for acute care hospitals and hospital-based
		emergency departments
1000	Free-standing emergency clinic, first aid station (with a physician in	
1000	attendance)	
		Reserved for individual RPC use if RPC chooses to develop site-
	1001-1999	specific codes for free-standing emergency clinics, or first aid
	stations (with a physician in attendance)	
2000	Physician, physician's office, or clinic (with a physician in attendance)	
		Reserved for individual RPC use if RPC chooses to develop site-
	2001-2999	specific codes for physicians, physician office, or clinics (with a
		physician in attendance)

#### One of the following codes must be used when *Caller Site* = Other:

<i>Call Site Code</i> Value	Description		
3000	Nursing ho	Nursing home, other chronic care residential facility, shelter	
		Reserved for individual RPC use, if RPC chooses to develop site-	
	3001-3499	specific codes for nursing homes, other chronic care residential	
		facilities, or shelters	
3500	Certified nu	rse practitioner, physician's assistant, midwife, dentist	
		Reserved for individual RPC use, if RPC chooses to develop site-	
	3501-3999	specific codes for certified nurse practitioners, physician's	
		assistants, midwives, or dentists	
4000	Registered nurse, school nurse, occupational nurse, correctional facilit		
4000	nurse (jail, j	prison, detention center), LPN, or home health agency	
4001-44		Reserved for individual RPC use, if RPC chooses to develop site-	
	4001-4400	specific codes for registered nurses, school nurses, occupational	
	4001-4455	health nurses, correctional facility nurses (jail, prison, detention	
		center), or LPNs	
4500	Ambulance, rescue/squad/dispatcher, EMT, paramedic, hazardous		
4000	materials te	am, police	
		Reserved for individual RPC use, if RPC chooses to develop site-	
	4501-4999	specific codes for ambulances, rescue squads/dispatchers, EMTs,	
		paramedics, hazardous materials teams, police	
5000	Detox center, mental health treatment facility (inpatient/outpatient), men		
5000	health work	er, psychologist	
		Reserved for individual RPC use, if RPC chooses to develop site-	
	5001-5499	specific codes for detox centers, mental health treatment facilities	
		(inpatient or outpatient), mental health workers, psychologists	

5500	Pharmacist or pharmacy	
	5501-5999	Reserved for individual RPC use, if RPC chooses to develop site-
		specific codes for pharmacists of pharmacies
6000	Veterinarians	
	6001-6499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for veterinarians, veterinary clinics, or animal hospitals
6500	Vehicles (include calls made from cars, boats, planes, trains)	
7000	Other	
	7001-7999	Free for other RPC assignments
8000	Poison Center	
	8001-8999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for other RPCs

#### Additional Detail:

*Note*: Where *Caller Site* = Other, if multiple other *Caller Site* codes are applicable, select the code that best identifies the <u>site</u> rather than the credentials of the caller. For example, a call from a certified nurse practitioner in a prison is coded as 4000 (or 4001-4499) for prison, rather than 3500 (or 3501-3999) for certified nurse practitioner.

#### Edits:

Valid codes: NULL, 1 - 8999. Not NULL if *Caller Site* is 4 (HCF) or 8 (other). (H) If *Caller Site* = 4, then range is 1 - 2999. (H) If *Caller Site* = 8, then range is 3000 - 8999. (H)

### → Call Subcategory

Common Name – Short: *Call Subcategory* NPDS field name: *caCallTypeCatlD* 

#### Definition:

Further specifies the type of information call.

#### **Coding Options:**

Call Subcategory Value	Description
Drug Information	n ( <i>Call Typ</i> e = 1)
10	Adverse effects (no known exposure)
20	Brand/generic name clarifications
30	Calculations
40	Compatibility of parenteral medications
50	Compounding
60	Contraindications
70	Dietary supplement, herbal, and homeopathic
80	Dosage
90	Dosage form/formulation
100	Drug use during breast-feeding
110	Drug-drug interactions
120	Drug-food interactions
130	Foreign drug
140	Generic substitution
150	Indications/therapeutic use
160	Medication administration
170	Medication availability
180	Medication disposal
190	Pharmacokinetics
200	Pharmacology
210	Regulatory
220	Stability/storage
230	Therapeutic drug monitoring
240	Other Drug Information
Drug Identification	on ( <i>Call Typ</i> e = 2)
250	PUBLIC INQUIRY Drug sometimes involved in abuse
260	PUBLIC INQUIRY Drug not known to be abused
270	PUBLIC INQUIRY Unknown abuse potential
280	PUBLIC INQUIRY Unable to identify
290	HEALTH PROFESSIONAL INQUIRY Drug sometimes involved in abuse
300	HEALTH PROFESSIONAL INQUIRY Drug not known to be abused
310	HEALTH PROFESSIONAL INQUIRY Unknown abuse potential
320	HEALTH PROFESSIONAL INQUIRY Unable to identify
330	LAW ENFORCEMENT INQUIRY Drug sometimes involved in abuse
340	LAW ENFORCEMENT INQUIRY Drug not known to be abused
350	LAW ENFORCEMENT INQUIRY Unknown abuse potential
360	LAW ENFORCEMENT INQUIRY Unable to identify
370	Other Drug Identification

<i>Call Subcategory</i> Value	Description
Environmental Ir	nformation ( <i>Call Type</i> = 3)
380	Air guality
390	Carbon monoxide – no known patient(s)
400	Carbon monoxide alarm use
410	Chem/bioterrorism/weapons (suspected or confirmed) - no known victim(s)
420	Clarification of media reports of environmental contamination
430	Clarification of substances involved in a HAZMAT incident – no known victim(s)
440	General questions about contamination of air and/or soil
450	HAZMAT planning
460	Lead – no known patient(s)
470	Mercury thermometer cleanup
480	Mercury (excluding thermometers) cleanup
490	Notification of a HAZMAT incident – no known victim(s)
500	Pesticide application by a professional pest control operator
510	Pesticides (other)
520	Potential toxicity of chemicals in the environment
530	Radiation
540	Safe disposal of chemicals
550	Water purity/contamination
560	Other Environmental Information
Medical Informat	tion ( <i>Call Type</i> = 4)
620	Dental questions
630	Diagnostic or treatment recommendations for diseases or conditions – non- toxicology
640	Disease prevention
650	Explanation of disease states
660	General first-aid
670	Interpretation of non-toxicology laboratory reports
680	Medical terminology questions
690	Rabies – no known patient(s)
700	Sunburn management
710	Other Medical Information
Occupational Inf	formation ( <i>Call Type</i> = 5)
720	Occupational treatment/first-aid guidelines – no known patient(s)
730	Information on chemicals in the workplace
740	MSDS interpretation
750	Occupational MSDS requests
760	Routine toxicity monitoring
770	Safe handling of workplace chemicals
780	Other Occupational Information
Poison Informati	ion ( <i>Call Typ</i> e = 6)
790	Analytical toxicology
800	Carcinogenicity
810	Food poisoning - no known patient(s)
820	Food preparation/handling practices
830	General toxicity
840	Mutagenicity

Call Subcategory	Description
850	Plant toxicity
860	Recalls of non-drug products (including food)
870	Safe use of household products
880	Toxicology information for legal use/litigation
890	Other Poison Information
Prevention/Safet	v/Education Information (OPTIONAL) (Call Type = 7)
1130	Confirmation of RPC number
1140	General (non-poison) injury prevention requests
1150	Media requests
1160	Poison prevention material requests
1170	Poison prevention week date inquiries
1180	Professional education presentation requests
1190	Public education presentation requests
1200	Other Prevention/Safety/Education Information
Teratogenicity Ir	formation ( <i>Call Type</i> =8)
900	
Other (Call Type	==9)
910	Other Information Call (not otherwise specified)
Substance Abus	e Information ( <i>Call Type</i> =10)
570	Drug screen information
580	Effects of illicit substances – no known patient(s)
590	New trend information
600	Withdrawal from illicit substances – no known patient(s)
610	Other Substance Abuse Information
Administrative (	OPTIONAL) ( <i>Call Type</i> =11)
920	Expert witness requests
930	Faculty activities
940	Funding
950	Personnel issues
960	RPC record request
970	Product replacement/malfunction (issues intended for the manufacturer)
980	Scheduling of RPC rotations
990	Other Administrative
Caller Referred (	Call Type =12)
1000	Immediate referral - animal poison center or veterinarian (Required for RPCs
	that do not manage animal exposures.)
1010	Immediate referral - drug identification
1020	Immediate referral – drug information (Required for RPCs that do not respond
	to drug information requests.)
1030	Immediate referral - health department
1040	Immediate referral - medical advice line
1050	Immediate referral - pediatric triage service
1060	Immediate referral - pesticide hotline
1070	Immediate referral - pharmacy
1080	Immediate reterral - poison center
1090	Immediate referral - private physician
1100	Immediate referral - psychiatric crisis line

<i>Call Subcategory</i> Value	Description
1110	Immediate referral - teratology information program
1120	Other Caller Referred

#### Additional Detail:

If a complex inquiry fits into multiple information Call Subcategories, select the subcategory that reflects the major purpose of the query from the caller's perspective. Information calls that evolve into exposure calls during the information collection process should be submitted to NPDS as exposure calls.

Note: Information calls were not recorded in NPDS prior to 1/1/2002.

The use of *Call Subcategories* noted as "OPTIONAL" are determined by each regional poison center. Regional poison center staff their director to find out if they are in use at that regional poison center. If a regional poison center does not handle animal poisonings or drug information requests, use the applicable "Caller Referred" coding options.

#### 900. Teratogenicity

This subcategory should be used for questions regarding the fetal effects of drugs or chemicals. During pregnancy, if the mother is exposed to a substance with a C, D, or X rating, the case should be coded as an exposure with the mother as the patient with an outcome of unable to follow, judged as potentially toxic. Teratogens which cause spontaneous abortion or fetal demise should be coded as exposures to the mother with "fetal death" as the clinical effect. Do not code an unborn fetus as a patient. Calls involving a documented effect to the child due to a teratogen should be coded as an exposure with the child as the patient.

#### 1120. Other Caller Referred

This subcategory can be used by regional poison centers that immediately refer a caller to another information resource without providing or attempting to provide any information. Referral to another regional poison center involves situations in which another regional poison center initially managed the case or in which the incorrect regional poison center was contacted initially and did not provide any management activities. This category should not be used when emergency calls involving poisoning victims are immediately referred to 911.

#### Edits:

Null if *Call Type* = 0. (E) Must be a valid value, Not NULL. (I) Otherwise, subcategory must match with *Call Type*. (I)

### → Call Type

Common Name – Short: Call Type NPDS field name: caCallTypeID

#### **Definition:**

Specifies if a call is an exposure call or an information call. It also specifies the type of information call.

#### **Coding Options:**

Call Type Value	Description
0	Exposure Call
1	Drug Information Call
2	Drug Identification
3	Environmental Information
4	Medical Information
5	Occupational Information
6	Poison Information
7	Prevention/ Safety/ Education Information (optional)
8	Teratogenicity Information
9	Other
10	Substance Abuse
11	Administrative (optional)
12	Caller Referred (optional)

### Exposure Call (Call Type = 0):

Actual or suspected contact with any substance which has been ingested, inhaled, absorbed, applied to, or injected into the body, regardless of toxicity or clinical manifestation. *Include*:

- Cases which are initially thought to be exposures even if confirmed as non-exposures later (e.g., all the implicated pills are found)
- Exposures to nontoxic substances, even if the patient did not report any clinical effects
- Exposures to toxic substances which, because of the amount involved or treatment rendered, do not cause clinical effects
- Adverse reactions associated with appropriate or inappropriate product use
- Information calls which, when further history is obtained, evolve into exposure calls

### Information Call (Call Type = 1-12):

A key feature of an information call is the lack of an identifiable exposed person. It is important to confirm that there is no exposed individual (human or animal). If the caller just wants information, use the coding options under *Call Subcategory*.

Exclude:

- Human exposures
- Animal exposures (If a regional poison center immediately refers all animal exposures to an animal poison center, code as "Immediate referral animal poison center"
- Follow-up calls regarding existing or closed exposure cases
- Wrong numbers

#### Differentiating between a drug information request and an exposure:

A request for information on a potential drug interaction, prior to the initiation of therapy with the involved drugs, should be coded as "Drug information: drug-drug interaction" (Call Type=1; Call Subcategory=110). If the call occurs after the initiation of therapy and involves drugs known to interact, or the patient has signs or symptoms of an interaction, the call should be coded as an exposure (Call

Type=0). In the absence of signs or symptoms, questions about the interaction of drugs not known to interact should be coded as "Drug information: drug-drug interactions".

A request for information during therapeutic use of a medication(s) should be coded as a drug information call as long as the patient has not experienced an adverse effect or toxicity that is suspected to be related to the involved medication.

A request for information about the use of medications during breast-feeding, prior to the initiation of therapy with the involved medications and/or prior to the initiation of breast-feeding, should be coded as "Drug Information: drug use during breastfeeding" Call Type=1; Call Subcategory=100). If the call involves questions about the use of medications in breast-feeding, after the initiation of therapy and breast-feeding, the call should be coded as an exposure, with the child as the patient, unless the medication is known to be safe during breast-feeding and the patient is asymptomatic in which case coding should be "Drug Information: drug use during breast-feeding".

Information requests regarding measurement of drug concentrations for therapeutic purposes should be included under "therapeutic drug monitoring" (Call Type=1; Call Subcategory=230), not "pharmacokinetics" (Call Type=1; Call Subcategory=190).

Drug recalls should be coded as "Drug information: regulatory" Call Type=1; Call Subcategory=210). Recalls of non-drug products should be coded as "Poison information: recalls of non-drug products" (Call Type=6; Call Subcategory=860).

#### Exclude:

- An adverse drug reaction associated with therapeutic use (code as an exposure)
- Drug interaction that results in symptoms (code as an exposure)
- The administration of an extra dose of medication (code as an exposure)
- "Does erythromycin cause nausea? I've been taking it and have been nauseated for three days." (code as an exposure)
- Drug abuse or street drug information (code as substance abuse)

#### Additional Detail:

If a complex inquiry fits into multiple information categories, select the category that reflects the major purpose of the query from the caller's perspective. Information calls that evolve into exposure calls during the information collection process should be submitted to NPDS as exposure calls.

Note: Information calls were not recorded in NPDS prior to 1/1/2002.

#### Edits:

Valid codes: 0-12, not NULL. (H)(A)(I). (NF) If > 0, then *Reason* must be NULL. (I) (NF) If > 0, then *Medical Outcome* must be NULL. (I)

### → Caller Site

Common Name – Short: *Caller Site* NPDS field name: *exSiteID\_Caller* 

#### **Definition**:

Site of the caller at the time of the initial call.

#### **Coding Options:**

Caller Site Value	Description
1	Own residence
2	Other residence
3	Workplace
4	Health Care Facility (HCF)
5	School
6	Restaurant/Food Service
7	Public Area
8	Other
9	Unknown

**1) Own Residence:** Any house, domicile or nearby phone (even if it is a public telephone) used to serve the residence of the *caller*.

#### Exclude:

• Calls from neighbor's or relative's home

2) Other Residence: Any house, domicile or nearby phone used to serve the residence of someone other than the caller.

Include:

- calls from neighbor's or relative's home
- calls from any public telephone used to serve the other residence
- calls from a person staying at a hotel

**3) Workplace:** Any shop, building, office or nonresidential room where the caller is employed. *Include*:

• A call from an exposed employee of a HCF while on the job

**4) Health Care Facility (HCF):** Any hospital-based patient care unit or emergency department, freestanding emergency medical clinic, first aid station, physician's office, or clinic. If this response is chosen, the specific HCF should be identified in the Call Site Code data field.

For purposes of this field, HCFs are those sites where a physician is (or is expected to be) in attendance. It is not necessary that the caller be a physician.

**5)** School: Any school, child care center, college, university, classroom, schoolyard, dormitory, or school-sponsored activity

#### Exclude:

- School cafeteria (code as restaurant/food service)
- School nurse (code as other)

**6) Restaurant/Food Service:** Any restaurant or other commercial food preparation area, including school cafeteria.

7) Public Area: Any park, theater, public event center, store, or other public site that is not a restaurant or other food preparation service.

#### Include:

- A call from a family barbecue in a public park
- A call from a beauty salon about a customer with an ocular exposure

**8)** Other: Any site not specifically defined above. Calls from an ambulance, rescue squad, car or other vehicle, chronic care residential facility, correctional facility (jail, prison, detention center, etc.), detox center, dispatch, home health agency, nursing home, pharmacy, school nurse or another regional poison center should be coded here, if a physician is not in attendance.

9) Unknown: Use if the site of the caller cannot be determined.

#### Additional Detail:

The caller may be someone other than the patient or the individual placing the call may first contact the regional poison center hours after the exposure; therefore this may not always be the site of the patient or *Exposure Site*.

Occasionally multiple caller sites are applicable and seem equally appropriate. In these cases, select the caller site with the highest priority from the following list ("A" is the highest priority):

A) Health Care Facility (HCF)

B) Other

- C) Own Residence/Other Residence
- D) School
- E) Workplace
- F) Restaurant/Food Service
- G) Public Area

#### Edits:

Valid entries: 1 - 9, not NULL. (H) Valid entries: 1 - 9, NULL (A)

### ➔ Case Number

#### Common Name – Short: Case Number NPDS field name: CaseNumber

#### **Definition:**

A number assigned to each case (exposure or information) that is unique for that calendar year.

#### Coding Options:

Case Number Value	
1 - 2147483647	Number assigned to each case that is unique for that calendar year

#### Additional Detail:

Each case must have a unique case number within a calendar year. Regional poison centers should number cases sequentially, including exposures and information calls.

All serial numbers used in any given calendar year must be unique. Reuse of a serial number during the same calendar year will result in overwriting the data from the prior case when it is submitted to NPDS. The data from the original case will be lost and the subsequent case data will be identified by the reused serial number (re-submission with the same case number is the only mechanism for correcting NPDS data which has already been submitted). In addition, the combination center code (either *Center Code [Private]* or *Primary Center Code*)/*Case Number*/*Year* provides the only unique identifier for each case.)

Dropped (deleted) case numbers should not be re-used.

#### Edits:

Valid entries: 1 - 2147483647, not NULL. (H)(A)(I)(O&C)

### ➔ Case Status

Common Name – Short: *Status* NPDS field name: *caStatusID* 

#### Definition:

Defines whether a case is open or closed. A closed case is one in which the regional poison center has determined that no further follow-up/recommendations are required or no further information on the case is available.

#### **Coding Options:**

Case Status Value	Description
1	Open
2	Closed
1076	Rejected by NPDS
1077	Deleted at Regional Poison Center

#### Additional Detail:

None.

#### Edits:

Valid entries for NPDS cases: 1, 2, not NULL. (H)(A)(I)(O&C) Valid entries for Auto Upload Acknowledgement file: 1, 2, 1076, 1077, not NULL. (H)(A)(I)(O&C)

### ➔ Center Code (Private)

Common Name – Short: Center Code Private NPDS field name: adOrganizationID\_Primary

#### **Definition:**

Code that identifies the regional poison center submitting the case to NPDS.

#### **Coding Options:**

Center Code (Private) Value	Description
1-999	Center code (private)

#### Additional Detail:

The identification of the regional poison center associated with each case is often sensitive information. If a given regional poison center releases their center code, the confidentiality of that regional poison center's data is compromised. In addition, please respect the confidentiality of codes belonging to other regional poison centers if the identity of these codes is learned. Data released by AAPCC to government agencies, researchers, industry, and other regional poison centers may contain center codes if inclusion of center codes is approved by the AAPCC board of directors.

#### Edits:

Valid entries: 1 - 999, not NULL. (H)(A)(I)(O&C) Must be an AAPCC-assigned code. (H)(A)(I)(O&C)

### ➔ Chronicity

Common Name – Short: Chronicity NPDS field name: exChronicityID

#### **Definition:**

Chronicity of the exposure.

#### **Coding Options:**

Chronicity Value	Description
1	Acute
2	Acute-on-Chronic
3	Chronic
4	Unknown

- 1) Acute: A single, repeated or continuous exposure occurring over a period of eight hours or less.
- Acute-on-chronic: A single exposure that was preceded by a continuous, repeated, or intermittent exposure occurring over a period exceeding eight hours. If this option is selected, the *Exposure Duration* field must also be coded. *Include*:
  - A patient who takes four daily doses of aspirin therapeutically for six weeks, then takes a single overdose
- Chronic: A continuous, repeated, or intermittent exposure to the same substance lasting longer than eight hours. If this option is selected, the *Exposure Duration* field must also be coded. *Include*:
  - A medication taken repeatedly for more than eight hours
  - A worker exposed to a chemical in the workplace intermittently, one day a week, for several months
  - A person exposed continuously to a chemical such as carbon monoxide for a period of time greater than eight hours.
- 4) **Unknown:** It is not possible to determine whether the exposure is acute, acute-on-chronic, or chronic.

#### **Additional Detail:**

*Chronicity* is coded at the case level. If a complex inquiry has multiple substances and multiple chronicities, select the chronicity that reflects the major clinical problem of the query.

#### Edits:

Valid codes: 1-4, not NULL. If 2 or 3, then *Exposure Duration* must be coded.

### ➔ Clinical Effect

Common Name – Short: CE NPDS field name: exClinicalEffectID

#### Definition:

Reported signs, symptoms and clinical findings associated with an exposure, recorded by relationship to the exposure.

#### **Coding Options:**

Select each *Clinical Effect* reported. Do not capture pre-existing conditions unless it is worsened by the exposure. Clinical effects and their definitions are listed below alphabetically by organ system. If clinical effects occur that are not on the list, document them in the medical record and select "other" for the clinical effect under the corresponding organ system or miscellaneous category.

#### Cardiovascular (1)

Asystole: Cardiac standstill; absence of cardiac contractions.

**Bradycardia**: Slowing of the heart rate to less than 60 beats per minute in adults. Apply age-related standards for children.

**Cardiac arrest**: Sudden cessation of cardiac function with disappearance of arterial blood pressure. **Chest pain (incl. noncardiac)**: Include both cardiac and noncardiac sources.

**Conduction disturbance:** Impaired cardiac conduction as evidenced by prolonged ECG intervals or any degree of heart block.

**Dysrhythmia (other):** Other cardiac rhythm disturbance (other than ventricular tachycardia, ventricular fibrillation, asystole, bradycardia, and tachycardia).

Dysrhythmia (v tach/v fib): Ventricular fibrillation, ventricular tachycardia or Torsades.

**ECG change (other):** Include other ECG changes not listed (ST-segment elevations, flipped T-waves, etc.).

**Hypertension**: Transient or persistent elevation of arterial blood pressure. Diastolic blood pressure >90 mm Hg in adults.

**Hypotension**: Abnormally low blood pressure; seen in shock but not necessarily indicative of it. In adults, blood pressure <90 mm Hg systolic or more than 15 mm Hg less than patient's usual systolic blood pressure.

**Tachycardia**: Excessively rapid heart rate (above 100 beats per minute in adults). Apply age-related standards for children.

#### Dermal (2)

Bullae: Large blisters, usually 2 cm or more in diameter.

Burns (superficial): A lesion caused by contact with a chemical, heat or radiation and showing redness.

**Burns 2 – 3 degree:** Second degree burns demonstrate vesication; third degree burns demonstrate necrosis. Second degree burns are typically partial thickness. Third degree burns are typically full thickness burns.

**Cellulitis**: Diffuse inflammation of soft tissue and/or connective tissues caused by infection. Include localized infections.

Dermal – Irritation/pain: Include dermal pain, irritation and/or burning sensations.

**Ecchymosis**: A non-elevated, blue or purplish hemorrhagic patch on the skin or mucous membranes. **Edema:** The presence of abnormally large amounts of fluid in the intercellular tissue spaces. Includes diffuse or localized swelling.

**Erythema/flushed**: Abnormal red discoloration of the skin usually caused by dilation of the capillaries. **Hives/welts:** Urticaria. An acute or chronic reaction in which transient red or pale elevated patches (wheals/welts) develop on the skin.

**Necrosis**: The death of some or all of the cells of the skin (or superficial tissue and connective tissue). **Pallor:** Abnormal paleness of the skin.

Pruritus: Itching.

**Puncture wound/sting**: A wound caused by a sharp object, such as a cactus, thorn or pencil, or a sting or envenomation (snakebite).

**Rash:** A temporary eruption on the skin, usually typified by reddening (either discrete or generalized). For a bee sting, code all that apply: edema, erythema/flushed, irritation/pain, puncture wound/sting, hives/welts.

#### Gastrointestinal (3)

Abdominal pain: Pain in the abdominal region.

Anorexia: Loss of appetite.

**Blood per rectum (other):** Stools or rectal effluent containing bright red blood or stools without gross evidence of blood that are guaiac positive on testing. If stools are tarry because of the presence of blood, code melena instead.

Constipation: Bowel evacuations occur infrequently or feces are hard and small.

Dehydration: Deficiency of water in body tissues. May be mild, moderate or severe.

**Diarrhea**: Frequent bowel evacuation or the passage of abnormally soft or liquid feces. **Dysphagia**: Difficulty swallowing.

**Esophageal injury**: 1°, 2° or 3° burns of the esophagus or mechanical injury.

**Esophageal stricture**: A narrowing of the esophagus as a result of scar tissue formation. Include esophageal stenosis.

**Fecal incontinence**: Involuntary passage of feces. (Do not include infants and toddlers who are not toilet-trained.)

**Gastric burns**: Endoscopic or surgical finding of chemical damage to the gastric mucosa, whether superficial or deep.

**Hematemesis**: Bloody emesis or bloody return per nasogastric tube (ranging from guaiac positive, blood-tinged to massive exsanguination).

**Ileus/no bowel sounds**: Mechanical or nonmechanical obstruction of the bowel or paralysis of the bowel wall. Absent bowel sounds on auscultation should also be coded here if the diagnosis of ileus is suspected.

**Melena**: Black tarry feces due to the presence of partly digested blood from higher up the digestive tract. **Nausea**: The feeling that one is about to vomit.

Oral burns (incl. lips): 1° - 3° burns of the oral mucosa, tongue or lips.

**Oral irritation**: Undue sensitivity in the oral cavity, usually characterized by redness or swelling. **Oropharyngeal edema**: Swelling of the lips, mouth, tongue, larynx, vocal cords, throat, palate, or buccal mucosa. This AAPCC definition is anatomically broader than the usual narrow definition of oropharynx. **Throat irritation**: Undue sensitivity in the throat, usually characterized by redness or swelling.

**Vomiting**: The reflex action of ejecting the contents of the stomach through the mouth. Do not code vomiting from ipecac as a clinical effect.

#### Heme/Hepatic (4)

**AST, ALT** >100≤1,000: AST is also known as SGOT; ALT is also known as SGPT.

AST, ALT >1,000: AST is also known as SGOT; ALT is also known as SGPT.

**Bilirubin increased**: Increased bile pigments in blood, usually manifested by dark amber discoloration of the plasma. Total bilirubin >1.0 mg/dL or >17  $\mu$ mol/L or greater than the normal limit for the laboratory performing the analysis.

**Cytopenia**: A deficiency of one or more of the various types of blood cells. Include anemia, pancytopenia, neutropenia and/or thrombocytopenia.

**DIC**: Disseminated intravascular coagulation. Include consumption coagulopathies.

Hemolysis: Destruction of red blood cells.

**Other coagulopathy**: Include prolonged PTT, prolonged bleeding times or other clinical or laboratory evidence of coagulopathy. Exclude DIC.

**Other LFT abnormality**: Include abnormalities in GGT (γ glutamyltransferase), ammonia, alkaline phosphatase, bromsulphalein excretion, 5' nucleotidase, LDH (unless known to be of nonhepatic origin), albumin or other.

**PT prolonged**: Prolonged clotting of blood as measured by an abnormally delayed protime. The ratio of the PT to the control must exceed 1.2 to code this option. Also code comparable abnormalities of the INR.

### Neurological (6)

**Agitated/irritable**: Include excessive restlessness, combativeness, fussiness, hyperactivity, shakiness, nervousness or anxiety.

Note: Crying and making a funny face are not considered symptoms or clinical effects. However,

persistent crying may be a manifestation of pain or irritability.

Ataxia: Muscular incoordination; include unsteady gait.

**Coma**: A state of unconsciousness. Include all levels of CNS depression in which the patient cannot be awakened with a stimulus.

**Confusion**: Disturbed orientation or inability of patient to think with customary speed and clarity. **CVA**: Cerebrovascular accident; a stroke syndrome.

**Dizziness/vertigo**: A disabling sensation in which the affected individual feels that he or his surroundings are in a state of constant movement. Include lightheadedness and other nonvertiginous complaints of dizziness.

**Drowsiness/lethargy**: Fatigue or sleep or minor levels of CNS depression from which the patient can be awakened with a stimulus. Do not code appropriate sleep (e.g., naps).

**Dystonia**: Disordered tonicity of muscles characterized by involuntary, irregular movements of the trunk or extremities. Include purposeless movements, choreoathetosis, and dystonic reactions to phenothiazines.

**Fasciculations**: Brief spontaneous contraction of a few muscle fibers, which is seen as a flicker of movement under the skin.

**Hallucinations**/**delusions**: A false perception of something that is not really there; an irrationally held belief that cannot be altered by rational argument.

Headache: Include head pain of any level of severity.

**Intracranial bleed**: Bleeding within the skull. Include subarachnoid, intracerebral and intracranial hemorrhages.

Muscle rigidity: Resistance to passive movement of the muscles.

**Muscle weakness**: Include any degree of partial loss of motor response, including subjective reports of weakness by patient.

**Numbness**: A peculiar sensation resulting from impaired cutaneous sensation. Numbness may be a symptom of peripheral neuropathy. If numbness is present and peripheral neuropathy is suspected, code both "numbness" and "peripheral neuropathy".

Paralysis: Permanent or temporary loss of motor function.

**Peripheral neuropathy**: All neuropathies occurring outside the central nervous system, usually causing weakness, numbness, sensory deficit or a tingling sensation. Include paresthesias.

**Seizure** (**single**): Convulsion, a violent involuntary contraction or series of contractions of the voluntary muscles. If seizures are present, code only one of these 3 options: 1) seizure (single); 2) seizures (multiple/discrete); 3) seizures (status). Select the most severe effect applicable.

**Seizures** (multi/discrete): More than one single seizure. If seizures are present, code only one of these 3 options: 1) seizure (single); 2) seizures (multiple/discrete); 3) seizures (status). Select the most severe effect applicable.

**Seizures** (status): Multiple seizures occurring without a lucid interval. If seizures are present, code only one of these 3 options: 1) seizure (single); 2) seizures (multiple/discrete); 3) seizures (status). Select the most severe effect applicable.

Slurred speech: Speech in which the words are slurred and incomplete.

**Syncope**: Loss of consciousness induced by a temporarily insufficient flow of blood to the brain. **Tinnitus**: Buzzing or ringing in the ear.

Tremor: A rhythmical alternating movement that may affect any part of the body.

#### Ocular (7)

Blurred vision: Loss of visual sharpness.

**Burns**: Ocular burn. Do not include irritation alone.

**Corneal abrasion**: Erosion of the surface of the cornea.

Lacrimation: The production of excess tears.

**Miosis**: Constriction of the pupil.

Mydriasis: Dilation of the pupil.

**Nystagmus**: Rapid involuntary movements of the eye(s) that may be vertical, horizontal or rotary. **Ocular – Irritation/pain**: Any degree of eve irritation, pain or stinging.

**Papilledema:** Swelling or edema of the optic disk or optic papilla.

**Photophobia**: Abnormal sensitivity to or avoidance of light.

**Pupil(s)** popresetive: Pupils do not reset to light

Pupil(s) nonreactive: Pupils do not react to light.

**Red eye/conjunctivitis**: Redness or inflammation of the mucous membrane covering the anterior portion of the eyeball and the lining of the eyelids. Do not include erythema of the skin of the eyelids or periorbital erythema; instead code these as dermal erythema.

Visual defect: Include blindness, decreased acuity, field defects, scotoma, floaters and others.

#### Renal/GU (8)

Creatinine increased: Creatinine elevation of >1.5 mg/dL or >133 µmol/L.

Hematuria: The presence of microscopic or gross blood in the urine.

Hemo/myoglobinuria: The presence of free hemoglobin or myoglobin in the urine.

**Oliguria/anuria:** The production of an abnormally small volume of urine or the absence of urine production.

**Oxalate crystals (urine)**: Microscopic evidence of excessive excretion of oxalate crystals in the urine. **Polyuria**: Excessive urine production.

**Renal failure**: Include acute and chronic renal failure that has produced clinically significant azotemia and loss of renal function.

**Urinary incontinence**: The involuntary passage of urine. (Do not include infants and toddlers who are not toilet-trained.)

Urinary retention: The inability to pass urine retained in the bladder.

**Urine color change**: Include only atypical color changes (blue, red, brown). Do not include normal variations in urinary concentration.

#### Respiratory (9)

**Bronchospasm**: Narrowing of bronchi by muscular contraction in response to some stimulus; wheezing; reactive airway diseases.

**Cough/choke**: A form of violent exhalation by which irritant particles in the airways can be expelled; interruption of respiration by obstruction. Also code "gagging" here.

Cyanosis: Bluish discoloration of the skin and mucous membranes.

**Dyspnea**: Labored or difficult breathing; shortness of breath.

**Hyperventilation**/tachypnea: Breathing at an abnormally rapid rate at rest; diagnosis is usually made with an arterial blood gas.

Pneumonitis: Inflammation of the pulmonary parenchyma.

**Pulmonary edema**: Accumulation of fluid in the lungs. Include cardiogenic and noncardiogenic etiologies. **Respiratory arrest**: Cessation of spontaneous respirations.

**Respiratory depression**: Diminished tidal volume and/or respiratory rate. Inadequate ventilation. Use this code only if objective information is provided to support the diagnosis of respiratory depression. **X-ray findings(+)**: Pulmonary x-ray findings other than normal. (Do not code non-pulmonary x-ray findings here.)

#### Miscellaneous (5)

**Acidosis**: Accumulation of acid or depletion of alkaline reserve; diagnosis is usually made by an arterial blood gas or lytes.

**ADR to treatment**: Patient experiences an adverse reaction to a treatment used for the patient's overdose (e.g., rash from IV NAC given for APAP overdose). Also code the specific clinical effect, e.g., rash. If the adverse reaction to the drug treatment produces a moderate effect, major effect, or death, code the drug given as treatment as one of the substances. Only select adverse reaction as the reason if the adverse reaction caused the major portion of the patient's clinical effects.

Alkalosis: Accumulation of base or loss of acid without comparable loss of base; diagnosis usually made by an arterial blood gas.

Anion gap increase:  $[Na^+ - (Cl^- + HCO_3)] > 12 mEq/L.$ 

Bleeding (other): Exclude bleeding in the GI tract or blood in urine.

**CPK elevated**: Creatine kinase elevations (including elevation of any isoenzyme) should be coded here. Creatine kinase is the current term for creatine phosphokinase.

Deafness: Decreased auditory acuity.

Diaphoresis: Excessive sweating.

Electrolyte abnormality: An imbalance in any of the electrolytes. Include sodium, potassium,

bicarbonate, chloride, calcium, magnesium and phosphate.

**Excess secretions**: Include drooling, foaming at the mouth, excessive salivation. Exclude lacrimation. **Fetal death**: Induced or spontaneous abortion, miscarriage, fetal demise, or in utero fetal death. Do not include cases of live premature birth with subsequent death. Fetal death is captured as a clinical effect, only. Do not prepare a NPDS case record for the fetus.

Fever/hyperthermia: A rise in body temperature above normal.

Hyperglycemia: Excess of glucose in the blood.

**Hypoglycemia**: Deficiency of glucose in the blood, usually associated with glucose concentrations below 70 mg/dL or 3.9 mmol/L.

Hypothermia: Reduction of body temperature below 95°F or 35°C.

Multiple chemical sensitivities: Complaints of sensitivity to multiple chemicals.

**Osmolal gap increased**: [2(Na) + (BUN/2.8) + (glucose/18)] - [measured osmolality determined by freezing point depression] >10 mOsm/kg H<sub>2</sub>O.

Other: Include dermal adhesions from glue exposures, dry mouth, photophobia and others.

**Pain (not dermal, GI, ocular)**: Exclude dermal, GI and ocular pain and headache. Include myalgia, arthralgia, irritation (e.g. nasal), burning, muscle spasms and others.

**Rhabdomyolysis**: Muscle damage resulting in the release of muscle cell contents into the circulation; commonly defined as a creatine kinase (CK) > 500 IU/L and/or the presence of myoglobinuria.. **Unspecified**: INACTIVE 12/31/1992

#### Clinical Effect Categories

Clinical Effect CategoryValue	Description
1	Cardiovascular
2	Dermal
3	Gastrointestinal
4	Heme/Hepatic
5	Miscellaneous
6	Neurological
7	Ocular
8	Renal/GU
9	Respiratory

#### Select all *Clinical Effects* reported:

Clinical Effect Value	Description
300	Bradycardia
301	Cardiac arrest
302	Chest pain (incl. noncardiac)
303	Conduction disturbance
304	Dysrhythmia (other)
305	Dysrhythmia (v tach/v fib)
306	Hypotension
307	Hypertension
308	Tachycardia
309	Bullae
310	Burns (superficial)
311	Burns 2 – 3 degree
312	Cellulitis
313	Ecchymosis

Clinical Effect Value	Description
314	Edema
315	Erythema/flushed
316	Hives/welts
317	Dermal – Irritation/pain
318	Necrosis
319	Pallor
320	Pruritus
321	Puncture wound/sting
322	Rash
323	Abdominal Pain
324	Anorexia
325	Constipation
326	Dehydration
327	Diarrhea
328	Dysphagia
329	Esophageal injury
330	Esophageal stricture
331	Fecal incontinence
332	Hematemesis
333	Melena
334	Nausea
335	Oral burns (incl. lins)
336	Oral burns (Incl. lips)
227	
220	Vemiting
220	
339	AST, ALT>100~-1,000
340	AST, ALT-1,000
341	Dilliubin increased
342	
243	DIC
344	DT prolonged
345	Other econylenetby
340	
347	
348	Agitated/irritable
349	Alaxia
350	Coma
351	Confusion
352	
353	Dizziness/vertigo
354	Drowsiness/lethargy
355	Dystonia
356	Fasciculations
357	Hallucinations/delusions
358	Headache
359	Intracranial bleed
360	Muscle rigidity
361	Muscle weakness
362	Paralysis
363	Peripheral neuropathy

Clinical Effect Value	Description
364	Seizure (single)
365	Seizures (multi/discrete)
366	Seizures (status)
367	Slurred speech
368	Syncope
369	Tinnitus
370	Tremor
371	Blurred vision
372	Burns
373	Corneal abrasion
374	Ocular – Irritation/pain
375	Lacrimation
376	Miosis
377	Mydriasis
378	Nystagmus
379	Papilledema
380	Pupil(s) nonreactive
381	Visual defect
382	Creatinine increased
383	Hematuria
384	Hemo/myoglobinuria
385	Oliguria/anuria
386	Polyuria
387	Renal failure
388	
389	Urinary retention
390	Bronchospasm
391	
392	Cvanosis
393	Dyspnea
394	Hyperventilation/tachypnea
395	Pneumonitis
396	Pulmonary edema
397	Respiratory arrest
398	Respiratory depression
399	X-ray findings(+)
400	Acidosis
401	ADR to treatment
402	Alkalosis
403	Anion gap increase
404	Bleeding (other)
405	Deafness
406	Dianhoresis
407	Electrolyte abnormality
408	Excess secretions
409	Fever/hyperthermia
410	Hyperalycemia
411	Hypoglycemia
412	Hypothermia
A13	Multiple chemical sensitivities
UL	

Clinical Effect Value	Description
414	Osmolal gap increased
415	Pain (not dermal, GI, ocular)
416	Rhabdomyolysis
417	Other
500	Asystole
501	ECG change (other)
502	Blood per rectum (other)
503	Gastric burns
504	lleus/no bowel sounds
505	Oropharyngeal edema
506	Numbness
507	Photophobia
508	Red eye/conjunctivitis
509	Oxalate crystals (urine)
510	Urine color change
511	CPK elevated
512	Fetal death
574	Unspecified INACTIVE 12/31/1992

#### Additional Detail:

For each *Clinical Effect* that occurs, determine the relationship of the effect to the exposure and enter the appropriate code in the *Clinical Effect Relatedness* field.

As follow-up of a case continues and additional (new) clinical effects are identified, continue to select those clinical effects until all clinical effects exhibited by the patient are coded.

There is no selection for patients with no clinical effects. These patients have a *Medical Outcome* of **no effect** (if followed).

#### Edits:

Must be a valid value or NULL.

At least one Related (1) or Unknown if Related (3) *Clinical Effect* is required if the *Medical Outcome* is 1, 2, 3 or 4.

### → Clinical Effect Relatedness

Common Name – Short: CE Relatedness NPDS field name: Related

#### **Definition:**

The relationship of the *Clinical Effects* to the substances reportedly involved in the exposure.

#### Coding Options:

For each *Clinical Effect* that occurs, determine whether the effect is:

Clinical Effect Relatedness Value	Description
1	Related to the exposure
2	Not related to the exposure
3	Unknown if related to the exposure

#### 1) Related to the exposure (R):

- Timing of clinical effect is reasonable for reported exposure
- Severity of effect is consistent with reported exposure
- Effect is consistent with anticipated substance toxicity
- Clinical assessment of relationship was made by a physician
- Note: An assessment of Related does not necessarily serve as confirmation of causality.

#### 2) Not related to the exposure (NR):

- Effect was pre-existing or began prior to the exposure, and was not augmented or worsened as a result of the exposure, or
- Effect can be attributed to a documented alternative etiology

#### 3) Unknown if related to the exposure (UR):

- Relationship between exposure and effect cannot be reasonably ascertained
- Effect has never been ascribed to the particular substance, but an alternative etiology cannot be conclusively established
- Effect is not expected based on reported exposure
- Knowledge of patient's history (e.g., concomitant illnesses, other medications) is not adequate to allow a determination of the relationship between the exposure and the effect

#### Additional Detail:

*Clinical Effect Relatedness* is judged in relation to each substance involved in the exposures at a case level. In cases that involve multiple substances, relatedness assessments are based on the full case and are not substance specific.

#### Edits:

Valid codes: NULL, 1-3. If *Clinical Effect* is defined then value must be 1-3. If there is at least one *Clinical Effect* with the *Clinical Effect Relatedness* = 1, then the *Medical Outcome* cannot be 0 or 5.

### → Clinical Effect Duration

Common Name – Short: *CE Duration* NPDS field name: *exClinicalEffectDurationID* 

#### Definition:

Time to resolution of all related clinical effects except those which are trivial or inconsequential.

#### **Coding Options:**

If *Medical Outcome* is recorded as minor effect, moderate effect or major effect, also select one of the following options for the *Clinical Effect Duration*:

Clinical Effect Duration Value	Description
1	$\leq$ 2 hours
2	> 2 hours to $\leq$ 8 hours
3	> 8 hours to $\leq$ 24 hours
4	> 24 hours to $\leq$ 3 days
5	> 3 days to $\leq$ 1 week
6	> 1 week to $\leq$ 1 month
7	> 1 month
8	Anticipated permanent
9	Unknown

#### Additional Detail:

If multiple clinical effects are reported, select the longest duration reported.

#### Edits:

Valid codes: NULL, 1-9. (H) Cannot be NULL if *Medical Outcome* = 1, 2, or 3. (H) If *Medical Outcome* = 0, then *Clinical Effect Duration* must be NULL. (H)
### ➔ Exposure Duration

Common Name – Short: *Exposure Duration* NPDS field name: *exExposureDurationID* 

#### Definition:

Duration of exposure if *Chronicity* is Acute-on-Chronic or Chronic.

#### **Coding Options:**

If *Chronicity* is Acute-on-Chronic or Chronic, code one of the following for exposure duration.

Exposure Duration Value	Description
1	> 8 hours to ≤ 24 hours
2	> 24 hours to ≤ 1 week
3	> 1 week to $\leq$ 1 month
4	> 1 month to $\leq$ 3 months
5	> 3 months
6	Unknown

#### Additional Detail:

*Exposure Duration* is captured at the case level. If a complex inquiry has multiple substances and multiple exposure durations, select the exposure duration associated with *Substance Sequence Number* = 1.

#### Edits:

Valid codes: NULL, or 1-6. If coded, *Chronicity* must be 2 or 3.

# ➔ Exposure Site

Common Name – Short: *Exposure Site* NPDS field name: *exSiteID* 

#### Definition:

Location of the patient at the time the exposure occurred.

#### Coding Options:

Exposure Site Value	Description
1	Own residence
2	Other residence
3	Workplace
4	Health Care Facility (HCF)
5	School
6	Restaurant/Food Service
7	Public Area
8	Other
9	Unknown

1) Own Residence: Any home or domicile that serves as the residence of the *patient*. *Exclude:* 

• Neighbor's or relative's home.

**2)** Other Residence: Any house or domicile that serves as the residence of someone other than the patient.

Include:

• Neighbor's or relative's homes

**3) Workplace:** Any shop, building, office or nonresidential room where the caller is employed. *Include*:

• Exposures occurring to an employee of a HCF while on the job

**4) Health Care Facility (HCF):** Any hospital-based patient care unit or emergency department, freestanding emergency medical clinic, first aid station, physician's office, or clinic.

For purposes of this field, HCFs are those sites where a health care provider is (or is expected to be) in attendance. It is not necessary that the caller be a physician.

**5)** School: Any school, child care center, college, university, classroom, schoolyard, dormitory, or school-sponsored activity.

Exclude:

- School cafeteria (code as restaurant/food service)
- School nurse (code as other)

6) Restaurant/Food Service: Any restaurant or other *commercial* food preparation area, including school cafeteria.

7) Public Area: Any park, theater, public event center, store, or other public site that is not a restaurant or other food preparation service.

Include:

- An exposure that occurs at a family barbecue in a public park
- A customer at a beauty salon with an ocular exposure

**8)** Other: Any site not specifically defined above. Exposures occurring in an ambulance, rescue squad, car or other vehicle, chronic care residential facility, correctional facility (jail, prison, detention center, etc.), detox center, and or nursing home should be coded here.

9) Unknown: Use if exposure site cannot be determined.

#### Additional Detail:

It is important to distinguish between the *Caller Site* and the *Exposure Site*. Examples include:

- If a mother calls from work about a child exposed at home, the *Caller Site* is workplace and the *Exposure Site* is residence.
- A nursing home resident is exposed in a nursing home (*Caller Site=* other [code the facility]; *Exposure Site =* other).
- A hospital employee is exposed at work then goes to the emergency department and the emergency department calls the regional poison center (*Caller Site=* HCF (code the emergency department facility); *Exposure Site = workplace*).

#### Edits:

Valid entries: 1 - 9, not NULL. (H) Valid entries: 1 - 9, NULL. (A)

# → Final Health Care Facility

Common Name – Short: *Final HCF* NPDS field name: *HCFFinal* 

#### Definition:

The type of health care facility (HCF) where the patient was ultimately managed when more than one HCF was involved in the patient's care..

#### **Coding Options:**

One of the following codes must be used when **Caller Site = HCF**:

<i>Final Health Care Facility</i> Value	Description	
0001	Acute care hospital and hospital-based emergency department	
	0002-0999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for acute care hospitals and hospital-based emergency departments
1000	Free-standing emergency clinic, first aid station (with a physician in attendance)	
	1001-1999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for free-standing emergency clinics, or first aid stations (with a physician in attendance)
2000	Physician, physician's office, or clinic (with a physician in attendance)	
	2001-2999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for physicians, physician office, or clinics (with a physician in attendance)

#### One of the following codes must be used when *Caller Site* = Other is selected:

<i>Final Health Care Facility</i> Value	Description	
3000	Nursing home, other chronic care residential facility, shelter	
	3001-3499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for nursing homes, other chronic care residential facilities, or shelters
3500	Certified nurse practitioner, physician's assistant, midwife, dentist	
	3501-3999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for certified nurse practitioners, physician's assistants, midwives, or dentists
4000	Registered nurse, school nurse, occupational nurse, correctional facility nurse (jail, prison, detention center), LPN, or home health agency	
	4001-4499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for registered nurses, school nurses, occupational health nurses, correctional facility nurses (jail, prison, detention center), or LPNs
4500	Ambulance, rescue/squad/dispatcher, EMT, paramedic, hazardous materials team, police	
	4501-4999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for ambulances, rescue squads/dispatchers, EMTs, paramedics, hazardous materials teams, police
5000	Detox center, mental health treatment facility (inpatient/outpatient), mental health worker, psychologist	

	5001-5499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for detox centers, mental health treatment facilities (inpatient or outpatient), mental health workers, psychologists
5500	Pharmacist or pharmacy	
	5501-5999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for pharmacists or pharmacies
6000	Veterinarians	
	6001-6499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for veterinarians, veterinary clinics, or animal hospitals
6500	Vehicles (include calls made from cars, boats, planes, trains)	
7000	Other	
	7001-7999	Free for other RPC assignments
8000	Poison Center	
	8001-8999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for other RPCs

#### Additional Detail:

If the patient is transferred to a second HCF, then the code of that facility is entered here.

During follow-up, if it is determined that the patient leaves the initial management site or is transferred from the referral site for additional medical or psychiatric care, this response should be coded in the *Final Health Care Facility* field by entering the HCF code of the facility at which the **patient was ultimately managed**. If more than one transfer facility is involved, code the second facility. If the patient is treated and/or evaluated in only one HCF, the *Final Health Care Facility* field should be left blank.

If multiple other *Final Health Care Facility* codes are applicable, select the code that best identifies the site of the health care provider, rather than the credentials of the health care provider. For example, a call from a certified nurse practitioner in a prison is coded as 4000 (or 4001-4499) for prison, rather than 3500 (or 3501-3999) for certified nurse practitioner.

#### Edits:

Valid codes: NULL, 1-7999. Must be NULL if *Initial Health Care Facility* is NULL.

### ➔ Free Area

#### Common Name – Short: Free Area NPDS field names: FreeArea1, FreeArea2A, FreeArea 2B, FreeArea2C, FreeArea3D, FreeArea3E, FreeArea3F

#### Definition:

Open fields that are provided for discretionary use by a regional poison center.

#### **Coding Options:**

Free Area Value	Description
1-32767	Numeric (integer) entry

Individual regional poison centers determine coding options for each of these fields.

#### Additional Detail:

Although regional poison centers may determine field names and coding options, output is limited to a single numeric (integer) entry per field (1-32767).

#### Edits:

Valid codes: NULL, 1 - 32767.

### → Gender

Common Name – Short: Gender NPDS field name: PaGenderID

#### **Definition:**

Gender of the patient.

#### **Coding Options:**

Gender Value	Description
1	Male
2	Female
3	Unknown Gender
4	Pregnant

#### Additional Detail:

If **Pregnant** is selected, female is assumed. It is not necessary to select both female and pregnant.

#### Edits:

1-4, not NULL. (H) If 4 (pregnant) then *Age Unit* must be 3-6 or 12-15. If *Age Unit* is 15, then *Age* must be >12 and <50. (H) (NF)

If 4 (pregnant), then *Pregnancy Duration* must be >= 2 and <46 or 99 for unknown. (H) (NF)

# ➔ Generic Code

Common Name – Short: *Generic Code* NPDS field name: *adGenericCategory* 

#### Definition:

A code that represents a broad group of related products that is used to identify the substances involved in both information and exposure calls.

#### **Coding Options:**

Select the most appropriate option from the *Generic Code* table for each substance involved.

#### Additional Detail:

Generic Code is a required field and all exposure cases must have at least one Generic Code.

All *Generic Codes* begin with the number zero. Use the *Generic Code* that best fits the product involved. Not all *Generic Codes* from the *Generic Code* table have a specific entry in Poisindex (e.g., fumes created when hypochlorite mixed with acid, swimming pool chlorine). The best code, even if it has no product code, should be used.

Enter the *Generic Code(s)* implicated in the exposure. *Generic Codes* for the first 3 substances are required if the patient was exposed to 3 or more substances, however AAPCC encourages the entry of all substances implicated, up to the maximum number of substances allowed by individual data collection software program vendors.

If more than one substance is implicated in an exposure, the substances must be prioritized by relative contribution to the patient's clinical condition.

**Product Codes** must also be entered whenever a more specific code than the **Generic Code** is available. Most computerized data collection software programs will automatically enter the **Generic Code** when a Poisindex® **Product Code** is selected.

#### Edits:

Must be an exact match of an existing, active AAPCC *Generic Code* if a *Product Code* is not sent. (H) (A) (I)

If exposure call, then *Generic Codes* cannot = Miscellaneous Information Calls (administrative information, poison information drug information, or medical information)

# ➔ Industry Contract Case

Common Name – Short: *Industry* NPDS field name: *IndustryContract* 

#### Definition:

Indicates the call was associated with an industry contract with the regional poison center.

#### Coding Options:

Industry Contract Case Value	Description
0	No
1	Yes

#### Additional Detail:

Designation of industry contract case data allows separation of these cases by the contracting company when they obtain NPDS data collected by all regional poison centers. In addition, it allows both local and national tabulations of industry contract volume.

#### Edits:

Valid codes: 0 or 1, not NULL. (H)(A)(I) (C&O)

# → Initial Health Care Facility

Common Name – Short: *Initial HCF* NPDS field name: *HCFInitial* 

#### **Definition:**

If *Caller Site* is Health Care Facility (HCF), the specific location type of the initial HCF site.

#### **Coding Options:**

One of the following codes must be used when *Caller Site* = HCF:

<i>Initial Health Care Facility</i> Value	Description	
0001	Acute care hospital and hospital-based emergency department	
	0002-0999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for acute care hospitals and hospital-based emergency departments
1000	Free-standing emergency clinic, first aid station (with a physician in	
1000	attendance)	
	1001-1999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for free-standing emergency clinics, or first aid stations (with a physician in attendance)
2000	Physician, physician's office, or clinic (with a physician in attendance)	
	2001-2999	Reserved for individual RPC use if RPC chooses to develop site- specific codes for physicians, physician office, or clinics (with a physician in attendance)

One of the following codes must be used when *Caller Site* = Other is selected:

<i>Initial Health Care Facility</i> Value	Description		
3000	Nursing hor	Nursing home, other chronic care residential facility, shelter	
	3001-3499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for nursing homes, other chronic care residential facilities, or shelters	
3500	Certified nu	Certified nurse practitioner, physician's assistant, midwife, dentist	
	3501-3999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for certified nurse practitioners, physician's assistants, midwives, or dentists	
4000	Registered nurse, school nurse, occupational nurse, correctional facility nurse (jail, prison, detention center), LPN, or home health agency		
	4001-4499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for registered nurses, school nurses, occupational health nurses, correctional facility nurses (jail, prison, detention center), or LPNs	
4500	Ambulance, rescue/squad/dispatcher, EMT, paramedic, hazardous materials team, police		
	4501-4999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for ambulances, rescue squads/dispatchers, EMTs, paramedics, hazardous materials teams, police	
5000	Detox center, mental health treatment facility (inpatient/outpatient), mental health worker, psychologist		

	5001-5499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for detox centers, mental health treatment facilities (inpatient or outpatient), mental health workers, psychologists	
5500	Pharmacist or pharmacy		
	5501-5999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for pharmacists or pharmacies	
6000	Veterinarians		
	6001-6499	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for veterinarians, veterinary clinics, or animal hospitals	
6500	Vehicles (include calls made from cars, boats, planes, trains)		
7000	Other		
	7001-7999	Free for other RPC assignments	
8000	Poison Center		
	8001-8999	Reserved for individual RPC use, if RPC chooses to develop site- specific codes for other RPCs	

#### Additional Detail:

If multiple other Initial Health Care Facility codes are applicable, select the code that best identifies the site of the health care provider, rather than the credentials of the health care provider. For example, a call from a certified nurse practitioner in a prison is coded as 4000 (or 4001-4499) for prison, rather than 3500 (or 3501-3999) for certified nurse practitioner.

If the patient is transferred to a second HCF, then the code of that facility is entered in the *Final Health* Care Facility field.

#### Edits:

Valid codes: NULL, 1 - 7999 If *Management Site* = 2 or 3, then *Initial Health Care Facility* must be between 1 and 2999. If *Management Site* = 4, then *Initial Health Care Facility* must be between 3000 and 7999. If Management Site = 2, 3 or 4, then Initial Health Care Facility cannot be NULL unless Level Of HCF *Care* = 5 or 6.

Must be NULL if *Management Site* = 1.

# ➔ Initial SPI Code

#### Common Name – Short: *Initial SPI Code* NPDS field name: *InitialSpiCode*

#### **Definition:**

Unique code which identifies each individual who responds to poison exposure calls or provides telephone consultations, as assigned by the regional poison center.

*Note:* Although this field is labeled *Initial SPI Code*, a code must be used to identify each individual responding to regional poison center calls or providing telephone consultations in the regional poison center, whether the individual is a specialist in poison information (SPI), certified specialist in poison information (CSPI), other poison information provider (PIP), regional poison center director, medical director, toxicology fellow in training, other health professional in training (e.g., rotating resident), or a student.

#### **Coding Options:**

Initial SPI Code Value	Description
1-9999	Unique code 1 to 4 digits

#### Additional Detail:

*Initial SPI Codes* are assigned by the regional poison center, and an individual SPI's code may change over time. The regional poison center must maintain a running log of *Initial SPI Code* assignments. *Initial SPI Code* numbers may not be reassigned during a calendar year.

#### Edits:

Valid entries: 1 - 9999, not NULL. (H)(A)(I)

## ➔ Level of HCF Care

#### Common Name – Short: Level of HCF Care NPDS field name: paLevelOfHCFCareID

#### Definition:

The highest level of HCF involved in management of the exposure.

#### **Coding Options:**

Level Of HCF Care Value	Description
1	Treated/evaluated and released
2	Admitted to critical care unit
3	Admitted to noncritical care unit
4	Admitted to psychiatric care facility
5	Patient refused referral/did not arrive at HCF
6	Patient lost to follow-up/left AMA

- 1) **Treated/evaluated and released**: The patient is observed, treated and/or evaluated, then released to home, work, shelter, jail or similar site which is not a HCF. If the patient came from a nursing home or other long-term care facility and went back to that facility from the HCF, select this response.
  - Include:
    - Patient treated/observed in a 23-hour observation unit to avoid admission
- 2) Admitted to critical care unit: The patient is admitted to a critical or intensive care unit. Select this response even if the regional poison center assessment is that the patient did not require critical care (e.g. admitted to intensive care units only because there were no other beds, or as a suicide precaution).
- 3) Admitted to noncritical care unit: The patient is observed or treated by a physician and subsequently admitted to a noncritical care unit.
  - If the patient is transferred to another hospital and then admitted to a noncritical care unit, code the *Initial Health Care Facility* and *Final Health Care Facility*. Select admitted to a noncritical care unit as this is the highest level of care rendered. DO NOT select treated/evaluated and released even though the patient *was* released from the initial HCF.
- 4) Admitted to psychiatric care facility: The patient is observed or treated by a physician and subsequently admitted primarily to receive psychiatric care or evaluation.
- 5) **Patient refused referral/did not arrive at HCF:** The patient declined to follow the regional poison center referral recommendation or failed to arrive at the HCF to which the patient was referred. The specific HCF to which the patient was referred to may be coded, but this code is not required.
  - If the patient arrives at a HCF different from the referral HCF, do not select this response. Enter the specific HCF code of the facility where the patient did arrive, and code the actual disposition (e.g., treated/evaluated and released, admitted to critical care unit, etc.)
  - This coding option is *not valid* for patients with *Management Site* = already in (en route to) HCF when PPC called.
- 6) **Patient lost to follow-up/left AMA**: The patient is lost to follow-up or the patient has left the HCF against medical advice (AMA).

#### Additional Detail:

If the patient is transferred and admitted to a critical care unit in a second HCF, code both HCFs, but only code the highest level of care rendered.

In all cases, code the highest level of care rendered regardless of where it was performed, per the following prioritization in descending order:

- 0) admitted for medical care INACTIVE; USED FOR 2000 2005 ONLY
- 1) admitted to critical care unit
- 2) admitted to noncritical care unit
- 3) admitted to psychiatric care facility
- 4) treated/evaluated and released

A patient with *Exposure Site* in a HCF should have the *Level of HCF Care* coded according to where the patient received care, even if the care was predominantly for an unrelated medical problem rather than for the exposure.

#### Example:

The regional poison center is called by the emergency department of HCF-A about a patient who is then transferred to HCF-B and admitted to the critical care unit of HCF-B. Code:

- Management Site = 2 (Patient already in (en route to) HCF when RPC called) and enter the code for HCF-A in the Initial Health Care Facility area
- After the transfer and admission to a critical care unit, select the level of HCF care **admitted to critical care unit** and enter the specific code for HCF-B in the *Final Health Care Facility* area.

#### Edits:

Valid codes: NULL, 1 - 6. Must be NULL if *Management Site* = 1, 4 or 5. If *Management Site* = 2 then 1-4 or 6 (not 5). If *Management Site* = 3 then 1-6.

## ➔ Location, Caller

#### Common Name – Short: *Location Caller* NPDS field name: *CallerLocationCode*

#### Definition:

Location of the *caller*. Each regional poison center may choose to code either the caller's ZIP code or the caller's area code/exchange.

#### **Coding Options:**

<i>Location, Caller</i> Value (must select only <u>one</u> of the options listed below)	Description
6-digit number	Telephone area code and exchange
5-digit number	ZIP code

Caller location codes can now be mixed between the two formats (area code/exchange effective as of 2/1/2007 OR ZIP code). Each regional poison center must designate one option as primary. For example, if a regional poison center prefers to capture data by ZIP code, all cases with a ZIP code provided will have the ZIP code sent to NPDS. However if the ZIP is blank and phone number is completed, the area code/exchange will be sent to NPDS instead. This provides more caller location data to NPDS. To facilitate report compilation at the local level, regional poison centers should not change their selection of primary caller location type mid-year.

Option #1:	Telephone number: A regional poison center may use the area code and
-	exchange (first three digits) of the <i>caller's</i> telephone number.
	Example: 801/581-7504 would be sent to NPDS as 801581
Option #2:	<b>ZIP code</b> : A regional poison center may use the ZIP code of the caller's address.
Option #3:	INACTIVE: A 1- to 4- digit location coding scheme devised by the regional poison
-	center was discontinued at the end of 1999

#### Additional Detail:

ZIP or phone codes must be entered whenever known. The field is left blank if the ZIP or phone code cannot be obtained. Do NOT invent codes for unknown locations. Only existing ZIP or phone codes are accepted.

Before sending data to NPDS verify the caller location code setting (either ZIP or area code/exchange).

One- and two- digit caller location codes will be stored as a partial phone number.

Three- and four- digit caller location codes will have zeros appended to the beginning, and if it is a valid ZIP code based on the state sent for the case, the value will be saved as a ZIP code. If the caller location code is not a valid ZIP code then 3 digit values will be stored as an area code and 4 digit values will be stored as a phone number.

For non-U.S. locations, telephone area code with exchange and/or ZIP code cannot be utilized as non-U.S. phone and ZIP code information is not compatible with the 6-digit and 5-digit fields respectively. Instead, document appropriate non-U.S. locations in the "State" variable, utilizing the appropriate designation codes for non-U.S. locations.

#### Edits:

#### Valid codes: 000001 – 999999, NULL.

If a 5 digit caller location code is a valid ZIP code based on ZIP code vendor data, then the ZIP code must be in the state provided for the case (*Note*: This edit is not performed for the following states: 52, 53, 54, 56, 57, 58). (H) (A) (I)

### ➔ Management Site

Common Name – Short: *Mgmt Site* NPDS field name: *paManagementSiteID* 

#### Definition:

Site where patient was managed.

#### **Coding Options:**

Management Site Value	Description
1	Managed on site (non-health care facility)
2	Patient already in (en route to) HCF when RPC called (code)
3	Patient was referred by RPC to a HCF (code)
4	Other
5	Unknown

For each human or animal exposure, select one of the following five coding options which best describes the initial management site of the patient from the following (always code the highest level of care rendered):

#### 1) Managed on site (non-health care facility):

The patient is treated at home or any other non-health care site. School or workplace exposures are included here only if the school or occupational health nurse was *not* consulted.

- If the regional poison center later refers the patient to a HCF, select choice #3 instead.
- Example: A hospital worker exposed on-site is coded as "managed on site, non HCF" unless seen by a physician or employee health nurse.

#### 2) Patient already in (en route to) HCF when RPC called (code):

At the time of *initial* contact with the regional poison center the patient is already in a HCF or en route to a HCF or was already treated or evaluated for this exposure in a HCF. For the purposes of this field, HCFs include only those sites where the patient is evaluated by a physician. If this response is chosen, the specific HCF should be identified by code in the **Initial Health Care Facility** field. This includes patients who refer themselves to a HCF despite advice provided by the regional poison center.

- Examples:
  - A patient is in an ambulance en route to a hospital ED; select this response and enter the *Initial Health Care Facility* code for the hospital where the patient is going.
  - If the patient identified above arrests en route to the hospital and cannot be resuscitated in the Emergency Department, select this response, code the *Initial Health Care Facility*, select the admitted to noncritical care unit secondary response in this area and select death in the *Medical Outcome* field.
  - Rescue squad is summoned to a residence but after consultation with medical backup the patient is left at home. *Do not* code this response; select "other" (*Management site* = 4) and enter the code for ambulance/rescue unit.

#### 3) Patient was referred by RPC to a HCF (code):

The patient is referred to a primary HCF (hospital-based or free-standing emergency department, physician's office or clinic) as part of a regional poison center's management recommendation. *For the purposes of this field, HCFs include only those sites where the patient is evaluated by a physician.* Use this option even if the regional poison center initially planned to manage the patient at home but later decided to refer the patient to a HCF.

• If this response is selected, *code the specific HCF* in the *Initial Health Care Facility* field using codes 1 thru 2999.

#### 4) Other:

Any management site not identified above. If a non-physician health care provider such as an EMT, paramedic, nursing home, dentist, veterinarian, detox center, jail, mental health center, occupational health nurse, pharmacist, or school nurse is involved in the patient's care, select this option. Code the specific facility or facility type in the *Initial Health Care Facility* field using codes 3000 thru 7999.

#### 5) Unknown:

Any management site that cannot be identified.

#### **Additional Detail:**

If the patient is managed in a HCF (whether already in or referred in by the regional poison center), then the *Level of HCF Care* must also be coded. *Initial Health Care Facility* codes are also required for patients managed in HCFs and for management site = "other".

Note about coding management site for fatalities:

- If patient is found dead and not transported to a HCF to be treated, evaluated or pronounced, code **managed on site**.
- If patient dies en route to a HCF and is not treated, evaluated or pronounced by a physician, code management site as **other**.
- If patient dies en route to a HCF and is treated, evaluated or pronounced in the Emergency Department, code admitted to noncritical care unit.
- If patient dies in the Emergency Department, code admitted to noncritical care unit.
- If patient is discharged from the Emergency Department and then dies, code *Level of HCF Care* as **treated/evaluated and released**.

#### Edits:

Valid codes: 1-5, not NULL.

Level of HCF Care code required if Management Site = 2 or 3.

*Initial Health Care Facility Code* required if *Management Site* = 2, 3, or 4 unless *Level of HCF Care* = 5 or 6.

If the *Management Site* = 1 (Managed on site (non-health care facility)) then all *Therapies* must be 130 (Ipecac), 131 (Charcoal, single dose), 132 (Charcoal, multiple doses), 134 (Cathartic), 136 (Other emetic), 137 (Dilute/irrigate/wash), 138 (Fresh air), 139 (Food/snack), 144 (Antihistamines), 149 (Bronchodilators), 150 (Calcium), 186 (Other), 513 (Antibiotics), or 523 (Steroids). [No other therapies are allowed] (NF)

### ➔ Medical Outcome

Common Name – Short: **Outcome** NPDS field name: **exMedicalOutcome** 

#### **Definition:**

Medical outcome of the patient following exposure based upon all available information.

#### **Coding Options:**

Medical Outcome Value	Description
0	No effect
1	Minor effect
2	Moderate effect
3	Major effect
4	Death
5	Not followed, judged as nontoxic exposure (clinical effects not expected)
6	Not followed, minimal clinical effects possible (no more than minor effect possible)
7	Unable to follow, judged as a potentially toxic exposure
8	Unrelated effect, the exposure was probably not responsible for the effect(s)
9	Confirmed non-exposure
10	Death, indirect report

### Case followed to known outcome:

Select the response which best describes the known medical outcome. A response is appropriate in this area only if follow-up continues until medical outcome can be documented with reasonable certainty. If the initial call is received long after the exposure, follow-up may not be necessary as a definitive outcome may already be evident during the initial call.

- **0)** No effect: The patient developed no symptoms as a result of the exposure. Follow-up is required to make this determination unless the initial regional poison center call occurs sufficiently long enough after the exposure that there is reasonably certainty that no effects will occur.
  - If this response is selected, do not code the duration of clinical effects.
- 1) Minor effect: The patient exhibited some symptoms as a result of the exposure, but they were minimally bothersome to the patient. The symptoms usually resolve rapidly and often involve skin or mucous membrane manifestations. The patient has returned to a pre-exposure state of well-being and has no residual disability or disfigurement. Follow-up is required to make this determination unless the initial regional poison center call occurs sufficiently long enough after the exposure that there is reasonable certainty that the clinical effect(s) will not worsen. Symptomatic patients must be followed until symptoms have resolved or nearly resolved, unless the residual symptoms are anticipated to be long-term and of minimal clinical significance. *Examples*:
  - Mild GI symptoms (self-limited, no dehydration)
  - Drowsiness
  - Skin irritation or 1° burn
  - Sinus tachycardia *without* hypotension
  - Bleach ingestion followed by one or two episodes of vomiting
  - Oral irritation from dieffenbachia
  - Insect bite with only pain, swelling and erythema
  - Transient cough
  - Tinnitus as the only manifestation of salicylism

- Iron ingestion with abdominal pain and one episode of vomiting and/or diarrhea without acidosis and without deferoxamine therapy
- 2) Moderate effect: The patient exhibited symptoms as a result of the exposure which are more pronounced, more prolonged or more of a systemic nature than minor symptoms. Usually some form of treatment is or would have been indicated. Symptoms were not life-threatening and the patient has returned to a pre-exposure state of well-being with no residual disability or disfigurement. Follow-up is required to make this determination unless the initial regional poison center call occurs sufficiently long enough after the exposure that there is reasonable certainty that the clinical effect(s) will not get worse. Symptomatic patients must be followed until symptoms have resolved or nearly resolved, unless the residual symptoms are anticipated to be long-term and of minimal clinical significance. *Examples*:
  - A corneal abrasion
  - Acid-base disturbance
  - High fever
  - Disorientation
  - Hypotension which rapidly responds to treatment
  - Isolated brief seizures which resolve spontaneously or readily respond to treatment
  - Minor creatinine elevations without clinical evidence of renal failure
  - Hepatic injury without encephalopathy
  - GI symptoms causing dehydration
  - Caustic injury to esophagus without perforation or residual injury
  - Conduction disturbance without hypotension
  - Acetaminophen poisoning with AST or ALT >100 U/L, without a prolonged PT and without encephalopathy, GI bleeding or acidosis
  - Snake envenomation with extensive swelling and ecchymosis
  - Theophylline overdose with vomiting and tachycardia
  - Methanol ingestion manifesting only anion gap metabolic acidosis
  - Cyclic antidepressant overdose with a conduction disturbance but no seizures, no coma and no life-threatening dysrhythmias
  - Aspirin overdose with acidosis, anion gap and no alteration of mental status
  - Hypoglycemia with confusion
- 3) Major effect: The patient has exhibited symptoms as a result of the exposure which were lifethreatening or resulted in significant residual disability or disfigurement. Follow-up is required to make this determination unless the initial regional poison center call occurs sufficiently long enough after the exposure that there is reasonable certainty the clinical effect(s) will not get worse. Symptomatic patients must be followed until symptoms have resolved or nearly resolved, unless the symptoms are anticipated to be long-term or permanent.

Examples:

- Patients who require intubation and mechanical ventilation
- Repeated seizures or status
- Ventricular tachycardia with hypotension
- Cardiovascular instability
- Coma with hypotension
- Cardiac arrest or respiratory arrest
- Ventricular fibrillation
- Esophageal stricture
- Disseminated intravascular coagulation (DIC)
- Cerebrovascular accident (CVA) or intracranial bleed
- Clinical evidence of renal failure (not just minor increases in creatinine)
- Cyanosis plus respiratory depression
- Rhabdomyolysis with myoglobinuria and marked CPK elevations
- Rhabdomyolysis with increased creatinine

4) Death: The patient died as a result of the exposure or as a direct complication of the exposure where the complication was unlikely to have occurred had the toxic exposure not preceded the complication. Only include those deaths which are probably or undoubtedly related to the exposure. A fatality verification is required. Also include deaths in which the exposure was a contributing factor in the death. For deaths determined to be unrelated to the exposure (those in which the most clinically significant clinical effects are coded as unrelated) code the outcome as "Unrelated effect" (the exposure was probably not responsible for the effect[s]).

### Case not followed to a known outcome:

In some circumstances it is not appropriate or possible to follow a patient to a reasonably certain medical outcome. In these instances, choose one of the following:

- 5) Not followed, judged as nontoxic exposure. The patient was not followed because per clinical judgment the exposure was likely to be nontoxic because:
  - The agent involved was nontoxic
  - The amount implicated in the exposure was insignificant (nontoxic), and/or
  - The route of exposure was unlikely to result in a clinical effect.

If this response is selected, there must be reasonable certainty that the patient will not experience any clinical effect from the exposure. Cases that refused follow-up if the exposure was judged as nontoxic may also be included.

- 6) Not followed, minimal clinical effects possible. The patient was not followed because, per clinical judgment, the exposure was likely to result in only minimal toxicity of a trivial nature. *If this response is selected, there must be reasonable certainty*, in a worst case scenario, that the patient will experience no more than a minor effect. Cases that refused follow-up if the exposure would possibly result in minimal clinical effects and would cause no more than a minor effect may also be included. *Examples*:
  - A call to a regional poison center is placed within 30 minutes of a child ingesting up to 80 mg/kg
    of acetaminophen. The maximum possible amount is known with certainty. The regional poison
    center chooses not to follow the case because in the regional poison center's estimation the child
    is not expected to develop anything more than minor GI disturbance.
  - An asymptomatic 10-month-old swallowed a mouthful of liquid dish detergent. No follow-up is provided.
- 7) Unable to follow, judged as a potentially toxic exposure. The patient was lost to follow-up (or the regional poison center neglected to provide follow-up) and per clinical judgment the exposure was significant and may have resulted in toxic manifestations with a moderate, major or fatal outcome.

### Exposure not responsible for the effect:

- 8) **Unrelated effect.** Based upon all the information available the exposure was probably not responsible for the effect(s).
- 9) **Confirmed nonexposure**. There is reliable and objective evidence that the exposure never occurred and that any symptoms exhibited by the patient were not related to the reported exposure. *Examples:* 
  - All missing pills are located.
  - The other parent confirms there were no missing pills.
  - Exclude:
  - This coding option is *not* intended for the patient who is sent to a HCF and later has a negative screen or assay of the substance, because the substance may have been ingested in a small amount, the limits of detection of the assay may have been inadequate, or the assay results may be unreliable.

### Death reported from another source:

10) Death, indirect report: A report of a fatality but no inquiry was placed to the regional poison center. AAPCC encourages regional poison centers to report all poisoning deaths in their regions, whether reported to the regional poison center or not. If postmortem reports on poisoning victims can be obtained (or notification of deaths from hospitals), please submit these cases. A fatality verification is required even if the death is reported indirectly, but AAPCC recognizes that the case abstract may be quite limited.

#### Include:

• Case obtained from a medical examiner who sends post mortem reports to the regional poison center or from a newspaper article.

#### Exclude:

• A medical examiner calling with a question about the cause of death or a family member calling with a question about a toxicology laboratory result.

#### Additional Details:

*Medical Outcome* should be the final determination made by the SPI/CSPI based upon all the information available at the conclusion of a case. Periodic follow-up should continue until outcome can be documented.

If minor effect, moderate effect, major effect or death are selected the implication is that the patient had clinical effects that were probably related to the exposure. If the patient had a minor, moderate or major clinical effect that was probably related to the exposure, also code the *Clinical Effect Duration*.

#### Edits:

Valid codes: 0-10, not NULL.

If a *Clinical Effect* has a relatedness of 1 (related), then *Medical Outcome* cannot be 0 or 5.

If *Medical Outcome* = 1, 2, 3 or 4, then at least one *Clinical Effect* must be 1 or 3 (related or unknown if related).

If *Medical Outcome* is 9 (Confirmed nonexposure), no *Clinical Effect* may be 1 or 3 (related or unknown if related).

See *Clinical Effects* for additional edits linking medical outcome and clinical effects.

## → Number of Follow-up Calls

Common Name – Short: *N Followup* NPDS field name: *FollowupConsults* 

#### Definition:

The number of follow-up contacts made on each case.

#### **Coding Options:**

<i>Number of Follow-up Calls</i> Value	Description
1-999	Number of follow-up calls

#### **Additional Detail:**

The data collection software program should automatically track and report this data.

To maintain accuracy, count only those instances in which the caller was contacted to obtain updated information on the patient. Do not count as follow-ups:

- Notes placed in the narrative for the sole purpose of documenting that a chart review or quality assurance activity was conducted
- Notes documenting an addendum to a previously saved note

#### Edits:

Valid codes: NULL, 1-999. (H) (A) (I)

# ➔ Number of Products

Common Name – Short: *N Products* NPDS field name: *NumOfSubstances* 

#### **Definition:**

The number of substances reported for each case.

#### **Coding Options:**

Number of Products Value	Description
1-65535	Number of products

#### Additional Detail:

The data collection software program should automatically track and report this data.

The *Number of Products* provided by the data collection software program is validated against the actual number of products received with the case.

#### Edits:

Valid codes: 1-65535, not NULL. *Number of Products* must match the number of substances sent with the case. (H) (A) (I)

### → Override

#### Common Name – Short: **Override** NPDS field name: **Override**

#### **Definition:**

Indication to accept a nonfatal edit (improbable but possible situation).

#### Coding Options:

<i>Override</i> Value	Description
0	No
1	Yes

Select the edit override to cancel all nonfatal edits for a given case. It is not possible to selectively cancel nonfatal edits.

#### Additional Detail:

Data edits are quality control measures designed to detect incorrect coding. AAPCC edits include fatal and nonfatal edits. Fatal edits detect coding errors or incompatible data and lead to data rejection.

Nonfatal edits represent improbable but possible situations. Upon verification that an improbable coding combination is appropriate, staff may override a nonfatal edit.

- Examples:
  - Fatal Edit: *Therapy* = intubation and *Management Site* = managed-on-site, non-health care facility; both should <u>not</u> be coded in the same patient.
  - Nonfatal Edit: *Reason* = suicide and *Age* = 6 years is an unlikely but possible combination; if data are confirmed then *Override* = 1.

#### AAPCC urges caution in selecting this option, as all nonfatal edits will be overridden for the case.

This option is not a substitute for careful troubleshooting of coding problems. We suggest that each regional poison center adopt a strict protocol for use of this option, allowing edit overrides ONLY when the case is reviewed by a supervisor. In addition, NPDS coordinators at each regional poison center should regularly review the report of all overrides and notify AAPCC of recurring override issues.

#### Edits:

Valid codes: 0 or 1, not NULL. (H) (A) (I)

# ➔ Pregnancy Duration

Common Name – Short: *Preg Duration* NPDS field name: *PregDurationWks* 

#### Definition:

If *Gender* = Pregnant, the number of weeks of pregnancy counting from the last menstrual period before conception.

#### **Coding Options:**

Pregnancy Duration Value	Description
NULL	Patient is not pregnant
2-45	Weeks of pregnancy
99	Unknown pregnancy duration

#### Additional Detail:

None

#### Edits:

Valid codes: NULL, 2-45 or 99. (H) If *Gender* = 4 (pregnant), then cannot be NULL. Must be NULL when *Gender* is not 2 (female) or 4 (pregnant).

# ➔ Primary Center Code

Common Name – Short: *Primary Center Code* NPDS field name: *PriCenterCode* 

#### **Definition:**

Identification of the primary regional poison center when more than one regional poison center is consulting on the same NPDS case.

### **Coding Options:**

Primary		
Center Code	Description	Status
Value		
203	AL- Regional Poison Control Center - Children's Hospital (Birmingham)	Active
204	AR- Arkansas Poison Control Center (Little Rock)	Active
205	AZ- Arizona Poison & Drug Information Center (Tucson)	Active
206	AZ- Banner Poison Control Center (Phoenix)	Active
207	CA- California Poison Control System-Fresno/Madera (Madera)	Active
208	CA- California Poison Control System-Sacramento (Sacramento)	Active
210	CA- California Poison Control System-San Diego (San Diego)	Active
209	CA- California Poison Control System-San Francisco (San Francisco)	Active
211	CO- Rocky Mountain Poison & Drug Center (Denver)	Active
212	CT- Connecticut Poison Control Center (Farmington)	Active
213	DC- National Capital Poison Center (Washington, DC)	Active
214	FL- FL/USVI Poison Information Center-Jacksonville (Jacksonville)	Active
215	FL- Florida Poison Information Center-Miami (Miami)	Active
216	FL- Florida Poison Information Center-Tampa	Active
217	GA-Georgia Poison Center (Atlanta)	Active
219	IA- Iowa Statewide Poison Control Center (Sioux City)	Active
221	IL- Illinois Poison Center (Chicago)	Active
222	IN- Indiana Poison Center (Indianapolis)	Active
223	KS- Mid-America Poison Control Center (Kansas City)	Active
224	KY-Kentucky Regional Poison Center (Louisville)	Active
225	LA- Louisiana Drug and Poison Information Center (Monroe)	Active
220	MA-Regional Center for Poison Control and Prevention Serving	Active
220	Massachusetts and Rhode Island (Boston)	Active
227	MD-Maryland Poison Center (Baltimore)	Active
228	ME- Northern New England Poison Center (Portland)	Active
220	MI- Children's Hospital of Michigan Regional Poison Control Center	Activo
229	(Detroit)	Active
231	MN-Hennepin Regional Poison Center(Minneapolis)	Active
232	MO-Missouri Regional Poison Center (St. Louis)	Active
234	MS- Mississippi Regional Poison Center (Jackson)	Active
235	NC- Carolinas Poison Center (Charlotte)	Active
237	NE- Nebraska Regional Poison Center (Omaha)	Active
239	NJ- New Jersey Poison Information and Education System (Newark)	Active
240	NM-New Mexico Poison & Drug Information Center (Albuquerque)	Active
241	NY- Upstate New York Poison Center (Syracuse)	Active
245	NY-New York City Poison Control Center (New York)	Active
247	OH-Central Ohio Poison Center (Columbus)	Active
248	OH-Cincinnati Drug and Poison Information Center (Cincinnati)	Active
250	OK-Oklahoma Poison Control Center (Oklahoma City)	Active
251	OR-Oregon Poison Center (Portland)	Active
253	PA-Pittsburgh Poison Center (Pittsburgh)	Active
254	PA-The Poison Control Center (Philadelphia)	Active
275	PR – Puerto Rico Poison Center (San Juan)	Active
256	SC- Palmetto Poison Center (Columbia)	Active

Primary Center Code	Description	Status
Value		
257	TN-Tennessee Poison Center (Nashville)	Active
259	TX-Central Texas Poison Center (Temple)	Active
260	TX-North Texas Poison Center (Dallas)	Active
261	TX-South Texas Poison Center (San Antonio)	Active
262	TX-Southeast Texas Poison Center (Galveston)	Active
263	TX-Texas Panhandle Poison Center (Amarillo)	Active
264	TX-West Texas Regional Poison Center (El Paso)	Active
265	UT-Utah Poison Control Center (Salt Lake City)	Active
266	VA-Blue Ridge Poison Center (Charlottesville)	Active
267	VA-Virginia Poison Center (Richmond)	Active
269	WA-Washington Poison Center (Seattle)	Active
270	WI- Wisconsin Poison Center (Milwaukee)	Active
272	WV-West Virginia Poison Center (Charleston)	Active
201	AK- Anchorage Poison Control Center (Anchorage)	INACTIVE
202	AL- Alabama Poison Center (Tuscaloosa)	INACTIVE
218	HI- Hawaii Poison Center (Honolulu)	INACTIVE
220	IA Poison Control Center (Iowa City)	INACTIVE
230	MI- DeVos Children's Hospital Regional Poison Center (Grand Rapids)	INACTIVE
233	MO The Children's Mercy Hospital Poison Center (Kansas City)	INACTIVE
236	ND- North Dakota Poison Information Center (Fargo)	INACTIVE
238	NH- New Hampshire Poison Information Center (Lebanon)	INACTIVE
243	NY Hudson Valley Regional Poison Center (Sleepy Hollow)	INACTIVE
242	NY- Ruth A. Lawrence Poison and Drug Information Center (Rochester)	INACTIVE
244	NY-Long Island Regional Poison Control Center (Mineola)	INACTIVE
246	NY-Western New York Poison Center (Buffalo)	INACTIVE
249	OH-Northern Ohio Poison Center (Cleveland)	INACTIVE
252	PA-Central Pennsylvania Poison Center (Hershey)	INACTIVE
255	RI Lifespan Poison Center (Providence)	INACTIVE
258	TN-Southern Poison Center (Memphis)	INACTIVE
268	VT Vermont Poison Center (Burlington)	INACTIVE
271	WI- University of Wisconsin Hospital & Clinics Poison Control Center (Madison)	INACTIVE

#### Additional Detail:

When two or more regional poison centers that participate in NPDS consult on the same case, secondary regional poison centers must identify the primary regional poison center to prevent duplication of the case in the national database. Primary regional poison centers should **never** enter a value in the **Primary Center Code** field for a given case; primary regional poison centers should leave the field *blank*. The secondary regional poison center should choose the appropriate primary regional poison center code from the list above to indicate that another regional poison center was primary (*Note*: Do NOT use **Center Codes (Private)**).

Cases with a primary regional poison center code will be reported in the regional poison center's data but will be dropped from the national database.

Collaborating regional poison centers must decide among themselves which regional poison center will be the primary regional poison center and which will be the secondary regional poison center(s). Usually the regional poison center with the most information on a case will be the primary regional poison center.

Do NOT code a *Primary Center Code* for a regional poison center that does not participate in NPDS. Regional poison centers *not* on the list above were not NPDS participants at the time this manual was compiled. Regional poison centers with status of "INACTIVE" are closed or not currently submitting to NPDS, thus these regional poison centers *cannot* be marked as primary.

The difference between *Primary Center Codes* and *Center Code (Private)* is that *Primary Center Codes* are  $\geq$  200 and *Center Code (Private)* are < 200.

#### Edits:

Valid entries: 200-299 or NULL.

# ➔ Product Code

Common Name – Short: **Product Code** NPDS field name: **adPoisIndex** 

#### **Definition:**

Code specific to the exact substance or product involved in both information and exposure calls.

#### **Coding Options:**

Select the most appropriate option from the available 7-digit **Product Codes** in Poisindex® for each substance involved.

#### Additional Detail:

Enter the *Product Code* for each substance involved. Codes for the **first 3 substances** are required if the patient was exposed to 3 or more substances, however AAPCC encourages the entry of all substances implicated.

If more than one substance is implicated in an exposure, the substances **must** be prioritized by relative contribution to the patient's clinical condition.

When choosing a substance code, select the code that gives the most information. This is usually a product-specific code.

**Never** select a Poisindex® **Product Code** that identifies a brand if the actual brand involved in the case is not known. If the brand but not the strength is known, a strength may be arbitrarily chosen to code. If an arbitrary strength is coded, all attempts should be made to select the appropriate dosage formulation (e.g., do not select a strength associated with filmstrip or dissolvable tablet unless that dosage formulation was involved).

**Do not** use codes listed as manufacturers' emergency phone numbers, as these match to the Poison Information *Generic Gode*, and do not provide information about the implicated substances.

**Do** *not* use codes followed by the word "synonym" in parenthesis. Also, **do** *not* use codes mapping to "medical review officer" or "visual color changes".

If a product is not found in Poisindex®, select a seven-digit *Generic Code* from the AAPCC *Generic Code* list. *Generic Codes* cannot be entered in the specific product field.

**Do not** use the **Product Code** of an outdated, discontinued or foreign product unless there is certainty that this is the product involved. Exception: a foreign product listing *may be used* if there is no product-specific code for the *identical* U.S. product. When such a code is used, submit a Product Inquiry Request to Micromedex Support for the U.S. Product.

If the *Product Code* cannot be identified for products with multiple ingredients, **do** *not* code the individual ingredients, rather use the appropriate *Generic Code* and leave the *Product Code* NULL.

Always document the implicated substances on the medical record *in addition* to the computerized record. *Note to on-line systems developers*: AAPCC requires the substance name *as entered by the SPI/CSPI (not* just the substance name as retrieved from Poisindex®) to be stored as retrievable free text or as a separate field. This is essential for both the regional poison center's and AAPCC's quality assurance.

**Concomitant Medications:** A concomitant medication is an additional drug or drug product which was in use at the time an event occurred but which may have not necessarily been co-ingested with the primary

substance. From the standpoint of properly characterizing adverse drug reactions it is extremely important to distinguish between these two types of situations.

If the concomitant medication was actually ingested at the time the primary drug was ingested, or the concomitant medication may have contributed to the adverse drug reaction, code the concomitant medication as an additional substance.

If the concomitant medication was administered at some time other than the time the primary drug was administered, and/or the concomitant medication was unlikely to have been a factor in the adverse drug reaction, do not code the concomitant medication as a substance, but rather, record the information in the "History, Symptoms, Calculations & Assessment" section of the medical record.

Identical *Product Codes* may **not** be used for more than one substance entry in any unique case. *Generic Codes* may be duplicated if multiple products were implicated and these products link to the same *Generic Code*.

#### Edits:

Valid codes: NULL,  $\ge$  2000000. (H) (A) (I) The same **Product Code** may not be used for more than one substance entry within the same case.

### ➔ Reason

Common Name – Short: *Reason* NPDS field name: *ExReason* 

#### **Definition:**

The underlying reason, purpose, or intent for which the exposure occurred.

- Unintentional: Exposure resulting from an unforeseen or unplanned event.
- Intentional: Exposure resulting from a purposeful action.
- Adverse Reaction: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to the active ingredient(s), inactive ingredient(s) or excipient of a drug, chemical, cosmetic, food or other substance when the exposure involves the normal, prescribed, labeled or recommended use of the substance.

County Options.	
Reason Value	Description
1	Unintentional - General
2	Unintentional - Environmental
3	Unintentional - Occupational
4	Unintentional - Therapeutic error
5	Unintentional - Misuse
6	Unintentional - Bite / sting
7	Unintentional - Food poisoning
8	Unintentional - Unknown
9	Intentional - Suspected suicide
10	Intentional - Misuse
11	Intentional - Abuse
12	Intentional - Unknown
13	Other - Contamination / tampering
14	Other - Malicious
19	Other - Withdrawal
15	Adverse reaction - Drug
16	Adverse reaction - Food
17	Adverse reaction - Other
18	Unknown reason

#### **Coding Options:**

### Unintentional

**1) Unintentional - General**: All unintended exposures that are not specifically defined below. Most unintentional exposures in children should be coded here. Never use this code if there is another code that fits the case.

Include:

- Toddler got into (and swallowed) a grandparent's prescription medicine, a bottle of drain opener left under the sink, or the entire contents of a container of chewable multivitamins
- Dermal exposure to poison ivy
- Unintentional plant ingestion

**2)** Unintentional - Environmental: Any passive, non-occupational exposure that results from contamination of air, water, or soil. Environmental exposures are usually, but not always, caused by manmade contaminants.

Include:

• Cases in which the exposed individual had direct control over the event that released the chemical but did not have direct control over the chemical itself:

- A man used a heat gun to strip paint from windows in his home. The cat had seizures and the family complained of headaches, nausea, anorexia, and fatigue.
- A man was sanding his older home over a period of 2 weeks. He did not use a mask or any protective equipment. Now he feels ill.
- o A man inhaled dust while target shooting; later an elevated lead level was documented.
- A woman driving a car with a large exhaust leak developed symptoms of CO toxicity.
- Three children were exposed to exhaust fumes while riding with the tail gate open
- Exposures to contaminated water resulting from improper disposal of chemicals
- Passive inhalation of toxic fumes or gases as a result of discharge at an industrial plant
- A hazardous materials incident
- Most non-suicidal, non-occupational carbon monoxide exposures
- Hazardous spills, explosions or emissions originating at industrial sites which contaminate local inhabitants
- Exposures to smog
- Radon exposures inside the home
- Smoke produced by gas appliances or fire in the home
- Chlorofluorocarbon (Freon®) leaks from refrigerators
- Formaldehyde exposure in the home due to insulation
- Exposure to radioactive particles carried in wind, water or soil
- Exposure to pesticides in food
- Exposure to pesticides after someone else applied them to the lawn or following indoor extermination procedures (professional pesticide applicator is coded as occupational)
- Exposure to heavy metals in soil, water, or household dust
- Exposure to lead-based paint (including pica)
- Food contaminated with heavy metals, pesticides, PCBs, drugs, etc
- Soils contaminated with heavy metals, dioxins, PCBs, pesticides
- Exposures involving gas space heaters, kerosene heaters, cabinet heaters, gas stoves, coal- and wood-burning stoves, and from pressed wood products, including particle board, plywood, paneling
- Ground water or surface water contaminated by hazardous materials such as hydrocarbons, pesticides, solvents, PCBs, metals
- Dust particle contamination generated by a chemical release from an industrial plant
- Contamination of soil or water from a landfill or chemical spill
- Exposure in the area surrounding a hazardous waste dump site
- Chemical spills on the highway that contaminate surrounding inhabitants
- Fumes or vapors from burning botanicals

#### Exclude:

- Cases in which the exposed individual had direct control over the substance:
  - Patient cleaning the bathroom with a water stain remover inhaled the vapor briefly
  - Inhalation exposure during clean-up of a bottle of insecticide that fell
  - Patient mixed Tilex and Bleach to produce a stronger cleaning agent and experienced chest tightness (code as intentional misuse). The patient's child was also exposed. The child's exposure *is* environmental.
  - A man sprayed the family room with a pesticide. His exposure is not environmental as he had direct control over the substance. His wife developed a headache after sitting in the room. (The wife's exposure *is* environmental.)
- Cases that are both occupational and environmental (code these as occupational)
- Bites or stings (code as bite/sting)
- Plant poisonings (these are usually unintentional general)

# **3) Unintentional - Occupational**: Any exposure that occurs as a *direct* result of the person being on the job or in the workplace.

Exclude:

• An exposure of family members to contaminated work clothing brought home

- An exposure of a child visiting a parent at work
- A suicide attempt or therapeutic error occurring at work
- Use of occupational or industrial materials outside the workplace
- Eating bad food at work (site of exposure is workplace; reason is food poisoning)

**4) Unintentional - Therapeutic error**: An unintentional deviation from a proper *therapeutic* regimen that results in the wrong dose, incorrect route of administration, administration to the wrong person, or administration of the wrong substance. Includes instances in which any type of substance (medications, herbals, non-pharmaceuticals or other products) is substituted for a medication. Drug interactions (or drug/food interactions) resulting from unintentional administration of drugs/foods which are known to interact should also be included.

#### Include:

- Pharmacy labeling or dispensing errors
- An oral decongestant placed in the nose due to a misunderstanding of instructions for use
- A case where both parents independently dose a child because neither was aware of the other's action
- 10-fold neonatal ICU dosing errors
- Administration of an antacid through the central venous line instead of the pediatric feeding tube
- A patient took silver polish instead of a kaolin/pectin suspension
- Concomitant use of MAO inhibitor and nasal decongestant (or aged cheese)
- Allergic reaction to medication given in error to a patient with a known allergy to the medication
- A child develops adverse effects as a result of exposure to a medication (excluding drugs of abuse) through breast milk
- Use of a non-drug substance as a home remedy

**5)** Unintentional - Misuse: Unintentional improper or incorrect use of a non-pharmaceutical substance. *Unintentional* misuse differs from *intentional* misuse in that the exposure was unplanned or not foreseen by the patient.

Include:

- A person who misread (or didn't read) a product label and mixed bleach and ammonia producing chloramine gas
- Exposure following gasoline siphoning
- A person who forgot he put bleach in a mug to clean it and then took a drink from the mug

6) Unintentional - Bite/sting: All animal bites and stings, with or without envenomation.

**7) Unintentional - Food poisoning**: All suspected or confirmed food poisoning regardless of clinical manifestation. This would include ingestion of any food contaminated with microorganisms. Select this reason even if the patient develops no symptoms from the contaminated food. *Include:* 

• Scombroid, ciguatera

Exclude:

- Food allergies (refer to adverse reaction section)
- Food deliberately adulterated (code as contaminant/tampering)
- A call about possibly spoiled food that has not been ingested (information request)

8) Unintentional - Unknown: An exposure determined to be unintentional but the exact reason is unknown.

#### Intentional

**9) Intentional - Suspected suicidal**: An exposure resulting from the inappropriate use of a substance for self-harm or for self-destructive or manipulative reasons.

Include:

• Suicides, suicide attempts, and suicide gestures, whether suspected or confirmed

- Cases in which history indicates patient was upset or depressed
- Patients who provide explanations for their actions such as "arguing with parents," "disturbed about poor grades," or "having marital problems"
- Ingestions of large quantities of one or more drugs where the only likely explanation is the patient's intent to harm himself

**10) Intentional - Misuse**: An exposure resulting from the intentional improper or incorrect use of a substance for reasons **other** than the pursuit of a psychotropic effect.

Include:

- A person deliberately mixes or applies a pesticide inappropriately so it will be more effective
- A person deliberately increases the dosage of a medication to enhance its therapeutic effect
- Overuse of caffeine to study for an exam

#### Exclude:

- Patients who want to get high (should be intentional abuse)
- Suspected child abuse (should be other malicious)

**11) Intentional - Abuse**: An exposure resulting from the intentional improper or incorrect use of a substance where the patient was likely attempting to gain a high, euphoric effect or some other psychotropic effect, including recreational use of a substance for any effect. *Include:* 

- A person who inhales helium to talk funny
- A person who uses GHB at a dance club
- An infant with toxic effects or withdrawal symptoms as a result of the mother's drug abuse while the child was in utero or while breast-feeding

**12) Intentional - Unknown**: An exposure that is determined to be intentional but the specific motive is unknown.

### Other

**13)** Other - Contaminant/tampering: The patient is an unintentional victim of a substance that has been adulterated (either maliciously or unintentionally) by the introduction of an undesirable substance. *Include*:

- Exposures associated with the "Tylenol" tampering incident would be coded here
- Manufacturing error with substitution of another chemical for a usual ingredient

• Glass fragments or metal flakes in a product introduced during the manufacturing process clude:

#### Exclude:

• Bacterial contamination of food (code reason as food poisoning), unless someone deliberately introduced bacteria to make the substance unfit for human consumption

**14) Other - Malicious**: Patients who are victims of another person's intent to harm them. Include cases where the individual thinks he has been poisoned by someone else even if there is doubt about the patient's psychological stability. This category should also be used to code cases of suspected child abuse involving a poisoning or overdose.

#### Include:

- A homicide or other form of intentional chemical assault
- Exposure to crowd control agents such as CS or CN, if the patient is known or suspected to be the intended victim.
- Exposure to a lead bullet shot by a policeman (even though the policeman's intent was not malicious, but rather achieving control of the victim)
- Confirmed exposures to chemical or biologic weapon

#### Exclude:

 Downwind inhalation of crowd control agents by bystanders (should be coded as unintentional environmental)  Poisoning caused by the actions of a young sibling or another child six years of age or under (code as unintentional general)

**19) Other - Withdrawal:** Inquiry about or experiencing of symptoms from a decline in blood concentration of a pharmaceutical or other substance after discontinuing therapeutic use or abuse of that substance. *Include*:

- A person has seizures and tremors after discontinuing ethanol use
- A newborn is treated for cocaine withdrawal following cocaine use by his mother

### Adverse Reaction

**15)** Adverse Reaction – Drug: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to the active ingredient(s), inactive ingredient(s) or excipient of a drug, chemical, or other drug substance when the exposure involves the normal, prescribed, labeled or recommended use of the substance.

Include:

- Drug intolerance
- Rash or diarrhea associated with antibiotic use
- Anaphylactic shock from drug use
- Reactions to sulfites or colorants in drugs
- Lack of a pharmacologic effect at therapeutic doses
- Reactions involving homeopathic medications, herbals, and dietary supplements if the product is marketed, used, or intended for therapeutic purposes or health promotion

#### Exclude:

 Adverse effects resulting from concomitant use of MAOIs and nasal decongestants (code as a therapeutic error)

**16)** Adverse Reaction – Food: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to a food substance.

Include:

- Reactions to monosodium glutamate
- Reactions to sulfiting agents in food
- Allergic reaction to food dyes
- Allergic reaction to food (including seafood and shellfish)

#### Exclude:

- Food poisoning or food contamination (code as unintentional food poisoning)
- Reactions involving homeopathic medications, herbals, and dietary supplements if the product is marketed, used, or intended for therapeutic purposes or health promotion (code as adverse reaction/drug)

**17)** Adverse Reaction - Other: Unwanted effects due to an allergic, hypersensitivity, or idiosyncratic response to a substance other than drug or food.

Include:

- Dermatitis associated with jewelry
- Dermatitis associated with the appropriate or recommended use of a cleaning product
- Dermatitis associated with cosmetic use

### Unknown

**18) Unknown Reason**: Reason for the exposure cannot be determined or no other category is appropriate.

#### Additional Detail:

First, determine whether the exposure is unintentional, intentional, an adverse reaction (occurring during therapeutic or appropriate use), or other. Then, choose the single response within that category that best

describes the reason the exposure occurred. On the medical record, document why a particular reason was coded. Histories do not have to be lengthy to be complete. Samples of medical record documentation of reason:

- Patient ingested because he was depressed.
- Both parents dosed child with medicine.
- Thought dog's pill was patient's heart medicine.

#### Edits:

Valid response: 1-19, not NULL.

(NF) If 3, then *Exposure Site* must be workplace (3).

(NF) If animal exposure then *Reason* cannot be 9 or 11. (A)

(NF) If 9, then *Management Site* cannot be on-site (1). (H)

(NF) If Reason = 3 (Occupational), 9 (Suspected Suicidal), 10 (Intentional Misuse), 11 (Intentional Abuse) or 12 (Intentional Unknown) then patient cannot be less than 6 years old. (H)

If Route = 75 (Bite/Sting) then Reason must be 6 (Bite/sting) or 3 (Occupational).
# → Related Case Number

Common Name – Short: *Related Case* NPDS field name: *CaseNumber\_Related* 

# Definition:

Primary case number when an exposure involves more than one patient (human and/or animal).

# **Coding Options:**

Enter the primary case number in the related case number field for all related cases *and* for the primary case.

Related Case Number Value	Description
1 - 2147483647	Primary CaseNumber for all related cases;

# Additional Detail:

An exposure involving more than one patient (human and/or animal) should be coded as a multiple exposure. Multiple exposures are coded as related cases by entering the case number of the primary record in an incident or exposure group. Any record may be selected as the primary record, although the record selected will usually be the one containing the most information about the case or the first case reported to the regional poison center.

Each exposed patient must have a separate, complete NPDS record. For related cases, the long detailed history and parts of the management plan can be copied onto related case records, but the remainder of the narrative must be customized to the specific patient. *Never* place specific individual patient information about more than one patient in an individual case medical record.

#### Edits:

Valid entries: NULL, or the case number of primary chart. (H) (A) (I)

# → Route

Common Name – Short: *Route* NPDS field name: *exRouteID* 

# **Definition:**

Route(s) of exposure.

# **Coding Options:**

Select all applicable exposure routes from the following (multiple routes may be selected):

Route Value	Description	
70	Ingestion	
71	Inhalation/nasal	
72	Aspiration (with ingestion)	
73	Ocular	
74	Dermal	
75	Bite/sting	
76	Parenteral	
77	Other	
78	Unknown	
524	Otic	
525	Rectal	
526	Vaginal	

- **70) Ingestion**: An exposure by the oral route. Exposures in which the material was put in the mouth but unlikely to have reached the stomach are also classified as ingestions. Ingestion accompanied by aspiration should be coded as aspiration. If aspiration is coded, ingestion is automatically coded by the data collection software program. It is not an error to code both ingestion and aspiration. *Include:* 
  - A gasoline ingestion in a child that results in aspiration is coded as both ingestion and aspiration
- **71) Inhalation/nasal:** An exposure by the pulmonary route (tracheal or nasal). This route usually pertains to gaseous or vaporized agents.

Include:

• Insufflation of cocaine

Exclude:

- Ingestions accompanied by aspiration (code Aspiration)
- **72)** Aspiration (with ingestion): An exposure by the pulmonary route (tracheal). This route usually pertains to liquid or solid agents and occurs during or following an ingestion. If aspiration is coded, ingestion must also be coded (ingestion will automatically be coded by the data collection software program).

Exclude:

- Insufflation of cocaine (code Inhalation/Nasal)
- A patient who is comatose from an overdose of pills who vomits and aspirates gastric contents (code the original route: **Ingestion**)
- 73) Ocular: An exposure involving the eyeball. *Exclude:* 
  - Peri-orbital exposures (code **Dermal**)
- 74) Dermal: An exposure involving the skin, hair or fingernails. *Include:*

- Thorn, cactus, or other puncture wounds
- Peri-orbital exposures
- 75) Bite/sting: An exposure resulting from an animal/insect bite or sting with or without envenomation.

**76) Parenteral:** An exposure resulting from the injection of a substance into the body.

77) Other: Any other route of exposure not listed. *Include:* 

- Penetrating (stab, gunshot) injuries
- 78) Unknown: The route of exposure is unknown.
- 524) Otic: An exposure to the ear or ear canal with or without perforation of the tympanic membrane.
- **525) Rectal:** An exposure involving the rectum where the implicated substance was physically placed in, applied to, or instilled in the rectum.
- **526)** Vaginal: An exposure involving the vagina where the implicated substance was physically placed in, applied to, or instilled in the vagina.

### Additional Detail:

At least one exposure route must be coded for all human and animal exposure cases. Multiple routes may be selected.

### Edits:

Valid codes: 70-78, 524-526, Not NULL. Routes must include Ingestion (70) when Aspiration (72) exists.

# ➔ Scenario Category, Scenario ID

Common Name – Short: Scenario Info NPDS field name: exScenarioCategory, exScenario

# Definition:

A description of the events that led to the reported exposure.

#### **Coding Options:**

<u>Select the one code that best describes the main reason for the error (Health Professional latrogenic Error excepted).</u>

Scenario Category Value	Scenario Category Description	Scenario ID Value	Scenario ID Description
REQUIRED		-	
1	Dosing/therapeutic errors	527	Incorrect dosing route
		528	Dispensing cup error
		529	10-fold dosing error
		575	Inadvertently took/given someone else's medication
		530	Inadvertently took/given medication twice
		531	Incorrect formulation or concentration given
		532	Incorrect formulation or concentration dispensed
		576	Wrong medication taken/given
		577	Health professional/iatrogenic error (pharmacist/nurse/physician)
		578	Exposure through breast milk
		579	More than 1 product containing same ingredient
		580	Medication doses given/taken too close together
		581	Confused units of measure
		533	Other incorrect dose
		534	Drug interaction
		535	Other/unknown therapeutic error
2	Vapor/fume problem	536	Exposure to product fumes/vapors in a poorly ventilated area
		537	Aerosol sprayed in face
		538	Products mixed, generating toxic vapor or fume
		583	Inhalation abuse
		584	Drift from adjacent area or ventilation system
		582	Other gas/fume/vapor exposure
OPTIONAL			· · ·

Scenario Category Value	Scenario Category Description	Scenario ID Value	Scenario ID Description
3	CRC (child resistant closure) on product	539	CRC present, opened by patient
		540	CRC present, not secured or closed
		541	No CRC, by purchaser's request or choice
		586	Physician Sample
		585	Unknown CRC Status
		542	No CRC, pharmacist dispensed without CRC and without a request for non-CRC closure
		543	No CRC, unknown reason
4	Access to product	544	Product temporarily open because product was in use and caregiver momentarily distracted
		545	Child or pet accessed medication/product from purse
		546	Child or pet accessed medication/product from suitcase
		547	Child caused exposure (gave to sib or pet, etc.)
		548	Stored in unlocked, low cabinet in kitchen or bathroom
		549	Stored within sight of child
		550 INACTIVE 1/11/2011	Storage area was accessible to child due to inadequate efforts to 'child proof'
		551	Product always left out
		552	Product stored inappropriately (other than above)
		553 INACTIVE 1/11/2011	Caregiver failed to provide routine supervision
		588	Other
5	Source of confusion about product – behavioral factors	554	Patient confused or mentally incompetent
		555	Container transfer involved (product transferred from original container to unlabeled container, incorrectly labeled container, or food container for use or storage and patient accessed product from second container)
		556	was a food

Scenario Category Value	Scenario Category Description	Scenario ID Value	Scenario ID Description
		557	Patient thought non-medication was a pill
		558	Exposure was the result of a dare or similar behavior, in a patient otherwise old enough to know better and mentally competent
		559	Non-food product stored in kitchen or refrigerator
6	Pesticide problem	560	Pest control operator applied product
		561	Pest control operator implicated in incorrect or excessive exposure
		562	Patient accessed treated area prematurely
		587	Other pesticide exposure
7	Miscellaneous	563	Inadequate decontamination after product use
		564	Exposure occurred during routine product use
		565	Worker neglected standard safety practices for use of product
		566	Product used uneventfully within past week; patient subsequently developed symptoms and thinks they are or may be related
		567	Patient has illness of unknown etiology and suspects connection with the product, medication, or a contaminant in environment
		568	Scenario unknown (not allowed with other options)

# 1) **Dosing/therapeutic errors**:

At least one of the following must be coded for all cases where the **Reason** for the exposure is Therapeutic Error. DO NOT use more than one code (Health Professional latrogenic Error excepted) <u>unless</u> two separate and distinct errors occurred. <u>Select the code that best describes the main reason for</u> <u>the error</u>.

527) Incorrect dosing route: The medication given was correct but the route the medication was administered was incorrect. (If the pharmacy label was incorrect, also code "Health professional iatrogenic error").

528) Dispensing cup error: Medication dose was incorrect because dispensing cup was used incorrectly. This code only applies to medications that come with a plastic cup used to measure the dose (over-the-counter cough/cold medications most common source). Do NOT include

dosing errors made because of incorrect use of other measuring devices (these should be coded as "other incorrect dose").

529) 10-fold dosing error: Errors that result in 10-fold dosing errors caused by misplacement of the decimal point in calculating or interpreting doses. Do NOT include other errors that just happen to result in a 10-fold error.

575) Inadvertently took/given someone else's medication: Errors resulting from unintentionally being given medication that was not the victims; e.g., medication intended for another family member or pet.

530) Inadvertently took/given medication twice: Errors resulting from unintentionally taking or being given a second dose (forgot dose was just taken and unintentionally took another dose; or took a dose and, in the process of taking another scheduled medication, unintentionally took the same medication again). *Note:* do not code "medication doses taken/given too close together" in addition to this code unless this second type of error also occurred.

531) Incorrect formulation or concentration given: The drug to be given was correct but the formulation or concentration of the drug to be given was incorrect (too little or too much of the drug is given in this scenario). For example, include errors in which an adult formulation was given instead of the pediatric formulation or a child formulation was given instead of an infant formulation.

532) Incorrect formulation or concentration dispensed: The pharmacist dispensed the incorrect formulation or concentration of the drug prescribed. Also include cases in which the pharmacist dispensed the wrong drug or placed the wrong dose on the label. When using this code, also code "iatrogenic error". *Note*: this code also applies to others who are licensed to dispense from their practice sites (e.g., physicians, nurse practitioners, veterinarians).

576) Wrong medication taken/given: The wrong medication was taken; *the medication belonged to the person taking it.* (If error resulted in the same medication being taken twice, see "Inadvertently took/given medication twice").

577) Health professional iatrogenic error: The wrong medication or dose was taken or given because of a mistake made by a physician, nurse, pharmacist, or other health care professional. In most cases, use of this code prompts the coding of a second scenario. An example of a situation in which a second code is not required includes cases in which a contraindicated medication was ordered by a health care professional and subsequently given.

578) Exposure through breast milk: Drug exposures in infants where the source of the exposure was from milk ingested while breast feeding.

579) More than one product containing same ingredient: Two or more products containing the same medication were given. Do NOT include the same medication given twice or two or more products containing different medications but similar drug classes (code as Drug Interaction)

580) Medication doses given/taken too close together: Errors that occur because the daily doses were taken earlier than they were due. For example, a dose is taken three times a day before caller realizes the dose should only be taken once daily. Do NOT include errors from medication inadvertently given twice (see definition above for "inadvertently took/given medication twice".)

581) Confused units of measure: Errors resulting from the misunderstanding the unit of measure. For example, teaspoon for tablespoon, ml for teaspoon, cc for teaspoon, unit dose for multiple dose container. Do NOT include errors resulting from a misplaced decimal (e.g., 0.5 ml for 5 ml); see "10-fold dosing error" above.

533) Other incorrect dose: Dosing errors that do not clearly fit one of the above categories. Includes misuse of measuring devices (e.g., giving an entire dropper full then realizing that the dose should have been measured using the marks on the dropper). Also includes unintentionally dosing with twice the amount of medication required (e.g., mom thought the dose was 10 mL and the dose should have been 5 mL). In addition, include doses given to patients at an in-patient facility that are too large for their degree of renal function (if renal function should have been known).

534) Drug interaction (Remember: drug interactions are coded as therapeutic errors (reason) unless the interaction has not previously been documented.): Two or more drugs were taken that resulted in a clinically significant drug interactions. Also include drug/food interactions that resulted in a clinically significant drug interaction. Do NOT use for drug-disease state interactions (see health professional iatrogenic error above).

535) Other/unknown therapeutic error: All other errors that are not dose related (see "Other incorrect dose") or situations where the cause of the error is not determined.

### Additional Detail:

Code only one scenario for each case with the exception of Health Professional latrogenic Error; coding more than one code is the exception and not the rule. DO NOT use more than one code (Health Professional latrogenic Error excepted) <u>unless</u> two separate and distinct errors occurred.

Scenarios are required for Dosing/Therapeutic Error issues. Scenarios are optional for all other categories but poison centers are strongly encouraged to use them to enhance the usefulness of NPDS data for monitoring product safety issues.

The limitations of telephone consultations prevent verification of an exposure scenario with absolute certainty. Code suspected scenarios if there is reason to *strongly suspect* they are applicable based on information gathered from the patient, family, caller, health care provider, medical record, post mortem report, etc.

Data based on "strongly suspected" scenarios has value for general public health monitoring purposes but should not be considered a part of the individual patient's formal medical record.

#### Edits:

Valid Codes: 527-568; 575-588, not 553 or 550.

If *Reason* = 4, then at least one of the Dosing Error scenarios must be selected.

If any one of the vapor/fume problem scenarios is selected (*Scenario Category* = 2), then inhalation (71) must be one of the *Routes*.

If any one of the dosing error scenarios is selected (*Scenario Category* = 1), then *Reason* must be 4 or 15. (NF)

# ➔ Species

Common Name – Short: **Species** NPDS field name: **PatSpecies** 

# **Definition:**

Species of the patient.

# **Coding Options:**

Species Value	Description
1	Human
2	Animal

### Additional Detail:

If animal is chosen, also code Animal Type.

Submission of data on animal exposures is required for NPDS participants that handle animal calls. If a regional poison center does not handle animal calls, each case must be coded as an information call under "Caller referred: immediate referral - animal poison center or veterinarian."

### Edits:

Valid values: 1-2, Not NULL.

# → Start Date

Common Name – Short: *Start Date* NPDS field name: *StartDate* 

# Definition:

The start date and time of the initial call to the regional poison center

# **Coding Options:**

The data collection software program will automatically collect or convert the date and time to a serialized date/time field for submission to NPDS.

# **Additional Detail:**

The start date and time of the initial call to the regional poison center should be recorded. **Start Date** is not always the same day as the exposure date. The date an exposure actually occurred may be different than the date of the initial call to the regional poison center, in some instances even in a different year. The date and time of the exposure should be recorded in the notes field.

### Edits:

Valid datetime, Not NULL. (H) (A) (I) (O&C) Future dates of more than 2 hours are not allowed. (H) (A) (I) (O&C) The *Start Date* must match the *Year*. (H) (A) (I) (O&C)

# → State

Common Name – Short: State NPDS field name: adState

# **Definition:**

The code for the state from which the initial call was made.

#### Coding Options: State State Value Description Description Value AL – Alabama 1 31 NJ - New Jersey 2 AK – Alaska 32 NM – New Mexico 3 AR – Arkansas 33 NY - New York 34 NC – North Carolina 4 AZ – Arizona CA – California 5 35 ND – North Dakota 6 CO - Colorado 36 OH – Ohio OK – Oklahoma 37 7 CT – Connecticut 8 DE - Delaware 38 OR - Oregon 9 DC - District of Columbia 39 PA – Pennsylvania 10 FL – Florida 40 RI – Rhode Island 11 GA – Georgia 41 SC – South Carolina 12 HI – Hawaii 42 SD – South Dakota 13 ID – Idaho 43 TN – Tennessee 14 IL – Illinois 44 TX – Texas 15 IN – Indiana 45 UT – Utah 16 IA – Iowa 46 VT - Vermont 17 KS – Kansas 47 VA – Virginia 18 KY - Kentucky 48 WA – Washington 19 LA – Louisiana 49 WV – West Virginia 20 ME – Maine 50 WI – Wisconsin MD - Maryland WY – Wyoming 21 51 22 MA - Massachusetts 52 CN – Canada 23 MI – Michigan 53 MX – Mexico 24 54 FC – Other Foreign Country MN – Minnesota UM – Overseas US Military/Diplomat 25 MS – Mississippi 55 MO – Missouri 26 56 RG – Refused to give 57 UN – Unknown 27 MT – Montana 28 NE – Nebraska 58 TR – Other US Territory NV – Nevada PR – Puerto Rico 59 29 30 NH - New Hampshire 60 VI – US Virgin Islands

# Additional Detail:

DO NOT enter the patient's state of residence if it is not the state from which the call was made.

# Edits:

Valid codes: 1 – 60, not NULL. (H) (A) (I)

# →Substance Certainty

Common Name – Short: Certainty NPDS field name exCertainty

# Definition:

Confidence in the **Substance Quantity** recorded and how the estimate was derived.

# **Coding Options:**

Substance Certainty Value	Description	
1	exact	
2	estimate	
3	maximum possible	

# Additional Detail:

An exact quantity is preferred for all substances when available. If the exact quantity cannot be determined, the best possible estimate or maximum amount possible should be recorded.

### Edits:

Valid codes: 1-3, NULL allowable only if **Substance Quantity Unit =** 16.

# →Substance Formulation

Common Name – Short: *Formulation* NPDS name: *exFormulation* 

# Definition:

The formulation for each substance.

# **Coding Options:**

Substance Formulation Value	Description
1	Solid (tablets / capsules / caplets)
2	Liquid
3	Aerosol / mist / spray / gas
4	Powder / granules
5	Cream / lotion / gel
6	Patch
7	Other
8	Unknown

# Additional Detail:

Confirm the formulation for each substance with the caller rather than obtaining solely from the product information in Poisindex<sup>®</sup>.

# Edits:

Valid Codes: 1-8, Not NULL

# →Substance Quantity

Common Name – Short: **Quantity** NPDS field name: **Quantity** 

# Definition:

Numerical quantity or amount for each substance involved in an exposure case.

#### **Coding Options:**

Substance Quantity Value	Description	
0.001 - 99999.99	Actual quantity value	
NULL	Quantity not available	

#### **Additional Detail:**

For each substance, enter the quantity implicated in the exposure. If possible, enter the exact amount. If the exact amount is unknown, estimate the actual amount or the maximum possible amount. Use the **Substance Certainty** field to indicate confidence in the amount reported or how an estimate was derived.

Quantity is required for all substances in a case if the exposure to ANY of the substances was by the ingestion or parenteral route.

#### Edits:

Valid codes: 0.001 – 99999.99, if **Substance Quantity Unit** = 1-15, or 17, not NULL May be NULL if **Substance Quantity Unit** = 16. (does not have to be NULL) Must be NULL if **Substance Quantity Unit** is NULL.

# → Substance Quantity Unit

Common Name – Short: Quantity Unit NPDS field name: exQuantityUnit

# Definition:

*Quantity Unit* associated with the *Substance Quantity* reported for each substance involved in an exposure case.

# **Coding Options:**

Substance Quantity Unit Value	Description
1	µg (mcg, microgram)
2	mg (milligram)
3	g (gram)
4	kg (kilogram)
5	Ounces
6	lbs (pounds)
7	mL (milliliter)
8	L (liter)
9	teaspoon
10	tablespoon
11	tabs / pills / capsules
12	taste / lick / drop
13	mouthful(s)
14	sip(s)
15	each
16	Unknown
17	IU / units

# Additional Detail:

Required for each substance listed in all human and animal exposure cases if ingestion or parenteral *Route* of exposure.

# Edits:

Valid codes: NULL, 1-17.

Binary AutoUpload: If *Route* = Ingestion (70) or Parenteral (76) then at least one substance has to have *Substance Quantity Unit* Not NULL.

XML AutoUpload: If *Route* = Ingestion (70) or Parenteral (76) then the substance has to have *Substance Quantity Unit* Not NULL.

# → Substance Sequence Number

Common Name – Short: Sequence Number NPDS field name: exRank

### Definition:

Priority or rank of each substance by relative contribution to the patient's clinical condition.

#### Coding Options:

Substance Sequence Number Value	Description
1-99	Indicates rank value assigned to each substance, relative to all implicated substances

### Additional Detail:

Each substance must be assigned a sequence (rank) number.

Substance order is critical! Be certain to list substances in the order each contributed to the patient's clinical findings.

Example:

• A patient with an ingestion of amitriptyline and acetaminophen develops QRS widening but no hepatic toxicity must have amitriptyline coded as the first substance.

#### Edits:

Valid codes: 1-99, not NULL. (H) (A)

# ➔ Therapy

Common Name – Short: *Therapy* NPDS field name *paTherapy* 

# Definition:

Therapies that were recommended and/or performed in relation to the exposure reported.

# **Coding Options:**

Select each *Therapy* that is recommended and/or performed.

		Description	Expanded Description
Decontamination	130	Ipecac	
	131	Charcoal, single dose	A single dose of activated charcoal administered to decontaminate the gut
	132	Charcoal, multiple doses	More than one dose of activated charcoal administered to decontaminate the gut and/or to enhance total body clearance of the substance
	133	Lavage	
	134	Cathartic	A laxative, cathartic or enema
	135	Whole bowel irrigation	Oral administration of large quantities of electrolyte solutions to evacuate the gut
	136	Other emetic	Emesis induction with an agent other than ipecac syrup. Include mechanical stimulation (gagging), mustard, eggs, detergent solutions, apomorphine and others
	137	Dilute/irrigate/wash	Include: 1) administration of water or fluid to decrease the concentration of a substance; 2) removal of a substance from the eye or skin by flooding the area with water; 3) cleansing with soap or detergent; 4) using a solvent to aid removal; 5) nasal or aural irrigation <i>Examples</i> : • use of acetone to remove cyanoacrylate glue from the skin • vegetable oil to remove capsicum from the skin
	138	Fresh air	Removal of the patient from a contaminated environment to a source of fresh air. This response usually pertains to inhalation exposures.

		Description	Expanded Description
	139	Food/snack	Administration of milk or other food as a demulcent or administration of sugar-containing food or drink to avoid hypoglycemia. If fluid is administered as a diluent, code <b>dilute/irrigate/wash</b> instead
Other Therapies	140	Alkalinization	Ŭ
	141	Amyl nitrite	
	142	Antiarrhythmic	
	143	Anticonvulsants	
	144	Antihistamines	
	145	Antihypertensives	
	146	Antivenin/antitoxin	
	147	Atropine	
	148	BAL	
	149	Bronchodilators	
	150	Calcium	
	151	Cardioversion	
	152	CPR	
	153	Deferoxamine	
	154	ECMO	
	155	EDTA	
	156	Ethanol	
	157	Extracorp. procedure (other)	
	158	Fab fragments	
	159	Fluids. IV	
	160	Flumazenil	
	161	Folate	
	162	Glucagon	
	163	Glucose, > 5%	
	164	Hemodialysis	
	165	Hemoperfusion	
	166	Hydroxocobalamin	
	167	Hyperbaric oxygen	
	168	Intubation	
	169	Methylene blue	
	170	NAC, IV	
	171	NAC, PO	
	172	Naloxone	
	173	Neuromuscular blocker	
	174	Oxygen	
	175	2-PAM	
	176	Penicillamine	
	177	Physostigmine	
	178	Phytonadione	
	179	Pyridoxine	
	180	Sodium nitrite	
	181	Sodium thiosulfate	
	182	Succimer	
	183	Iransplantation	
	184	Vasopressors	
	185	Ventilator	

	Description	Expanded Description
186	Other	
513	Antibiotics	
514	Antiemetics	
515	Antivenin (fab fragment)	
516	Benzodiazepines	
517	Fomepizole	
518	Insulin	
519	Nalmefene	
520	Octreotide	
521	Pacemaker	
522	Sedation (other)	
523	Steroids	
560	Other Decontamination	
509	(INACTIVE)	
570	Acidification	
571	Exchange transfusion	
572	Forced diuresis	
573	Peritoneal dialysis	

#### Additional Detail:

Multiple therapies are appropriate.

Only one charcoal selection is allowed to be Performed or Recommended and Performed - single dose OR multiple doses.

AAPCC does not attempt to capture all possible therapies, but limits the list to those generally relevant to the exposure reported. A regional poison center specific free area or an additional computerized field may be used to capture additional therapies.

#### Edits:

Valid codes for *Therapy*: 130–186, 513–523, 569-573, NULL. Must not contain both 131 and 132 when either *Therapy* is Recommended and Performed, or Performed.

# ➔ Therapy Option

### Common Name – Short: *Therapy Option* NPDS field name *paTherapyOptID*

# Definition:

The reason the case has no *Therapies* recorded.

# **Coding Options:**

Therapy Option Value	Description
1	No Therapy Provided
2	Observation Only
3	Patient Refused Any Help
4	Unknown if Therapy Provided

### Additional Detail:

Therapy Option field is ONLY populated if no therapies are reportedly recommended and/or performed.

#### Edits:

Valid codes for *Therapy Option*: 1 - 4, Null.

# ➔ Therapy Recommendation

Common Name – Short: *Therapy Rec* NPDS field name *paTherapyRecPerformID* 

# **Definition:**

The documentation of whether a *Therapy* was recommended and/or performed in relation to the exposure reported.

### Coding Options:

Therapy Recommendation Value	Description
1	Recommended
2	Performed
3	Recommended & Performed
4	Recommended, Known Not Performed

*Note*: The numbers 1 to 4 are the computer codes sent to AAPCC. Check both "recommended" and "performed" to indicate that a treatment was recommended and performed. There should *not* be a separate line labeled "recommended and performed" in the data collection software programs.

#### Additional Detail:

This field is *not* intended to characterize the quality of the care provided, but rather whether the regional poison center made a recommendation to perform the therapy. If the regional poison center initially recommended a therapy, then changed the recommendation later based on evolving clinical data, the therapy should still be coded as "recommended".

#### Edits:

Valid codes for *Therapy Recommendation*: 1 – 4, Not Null.

# → Weight

Common Name – Short: *Weight* NPDS field name: *WeightKg* 

# **Definition:**

Weight of the patient in kilograms (kg).

#### Coding Options:

Weight Value	Description
0.1-9999.9	Weight (kg)

#### Additional Detail:

Patient weight may be entered in pounds or kilograms. However, if captured in pounds the patient's weight must be converted to kilograms before being sent to AAPCC.

*Weight* should be captured to the nearest 0.1 kilogram. *Weight* should be captured on every patient where knowledge of the patient's weight will contribute to effective management of the patient. AAPCC does not expect SPIs to capture or record patient weight in those cases where the information is not needed to manage the case.

#### Edits:

Valid codes: NULL, 0.1 - 800. If > 30, then **Age Unit** cannot be 16 or 17. (NF) (H) If > 30, then **Age**  $\geq$  4. (NF) (H)

# → Year

Common Name – Short: Year NPDS field name: Year

# **Definition:**

Year in which the initial call to the regional poison center was received.

### **Coding Options:**

Year Value	Description
4-digit, Current Year	Year

#### **Additional Detail:**

Data should be captured automatically from the Start Date field.

Field required for all human exposures, animal exposures and information calls.

# Edits:

Valid value: 4-digit year, no future dates over 2 hours allowed, not NULL. (H) (A) (I) (C&O)

# **Revision History**

Version Number	Approval Date	Comment
3.1	Original approval by AAPCC	Corrected toxiCALL® contact
	board of directors May 7, 2014;	information; Corrected
	v3.1 released June 17, 2014	instructions for coding Age
3.0	May 7, 2014	Updated manual, removed
		conflicting information,
		standardized presentation of
		variables
1.1	May 2009	NPDS System Manual
1.0	June 2007	NPDS Reference Manual Part 2
		<ul> <li>System Information Manual</li> </ul>
1.0	November 2001	NPDS Reference Manual Part 2
		<ul> <li>System Information Manual</li> </ul>