



1983 Annual Report of the American Association of Poison Control Centers National Data Collection System

JOSEPH C. VELTRI, PharmD, TOBY L. LITOVITZ, MD

Since the inception of the first poison center in 1953, numerous obstacles to data collection have delayed the creation of a meaningful database of human poison exposures. Historically, the effort to develop a coordinated national poison exposure database began in 1957 when the United States Surgeon General created the National Clearinghouse for Poison Control Centers (NCPCC). The mandate of this Public Health Service agency included coordinating the flow of information among the existing 17 poison control centers, and a mechanism whereby these centers could share their experience—a data collection system—was implemented.

Unfortunately, neither regulatory power nor funding capability was integrated in the new plan, and the NCPCC obtained poison center cooperation voluntarily by offering data collection services at no direct cost to the participating centers. In the early years of

this system a standard case data form was supplied by NCPCC to the centers, completed by poison center staff, and returned to NCPCC for hand tabulation. The system became semi-automated in the early 1960s simultaneously with the rapid proliferation of poison control centers nationally.

The number of poison control centers increased from 17 centers in 1957 to over 600 sites by the mid-1960s, yet no organizational structure or network emerged. The centers developed without common objectives, standards, or data collection techniques. During this period the NCPCC continued to collect, computerize, and publish data from reporting poison control centers. However, data collation was not timely, the usual lag being 18 to 24 months. Furthermore, medical record-keeping was limited to a 3" × 8.5" card with an attached lightweight carbon copy to be retained by the poison center. (The original record was returned to the NCPCC.) Approximately 150,000 poison exposures were reported annually, collected from 150 to 400 reporting sites, which were predominantly small emergency department-based operations.

As regionalization of poison control services began in the early 1970s, the NCPCC data collection system became clearly inadequate. The small size of the existing form prevented adequate medical documentation of poison exposures, the data collected failed to address local issues of poison center accountability, and the data processing turnaround time was excessive. Consequently, the emerging large, high-quality regional poison centers began to develop autonomous data collection systems lacking uniformity of definitions and analysis. Noting the diversion of this large number of cases (each of these regional centers recorded 20,000 to 70,000 poison exposures each year), there existed a fair degree of uncertainty regarding the representativeness of the NCPCC data. Thus, uncer-

From the Data Collection Committee, American Association of Poison Control Centers.

Centers (and on-site coordinators) participating for the pilot year include the Arizona Poison Control System (Lory Fischler), Intermountain Regional Poison Control Center (William Adkins, RPh), Mid-Plains Poison Control Center (Lora Lea Brennan, RN), National Capital Poison Center (Toby Litovitz, MD), Rocky Mountain Poison Center (Kathy Wruk, RN), and San Diego Regional Poison Control Center (Anthony Manoguerra, Pharm D).

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Address reprint requests to Dr. Litovitz: National Capital Poison Center, Georgetown University Hospital, 3800 Reservoir Rd. N.W., Washington, DC 20007.

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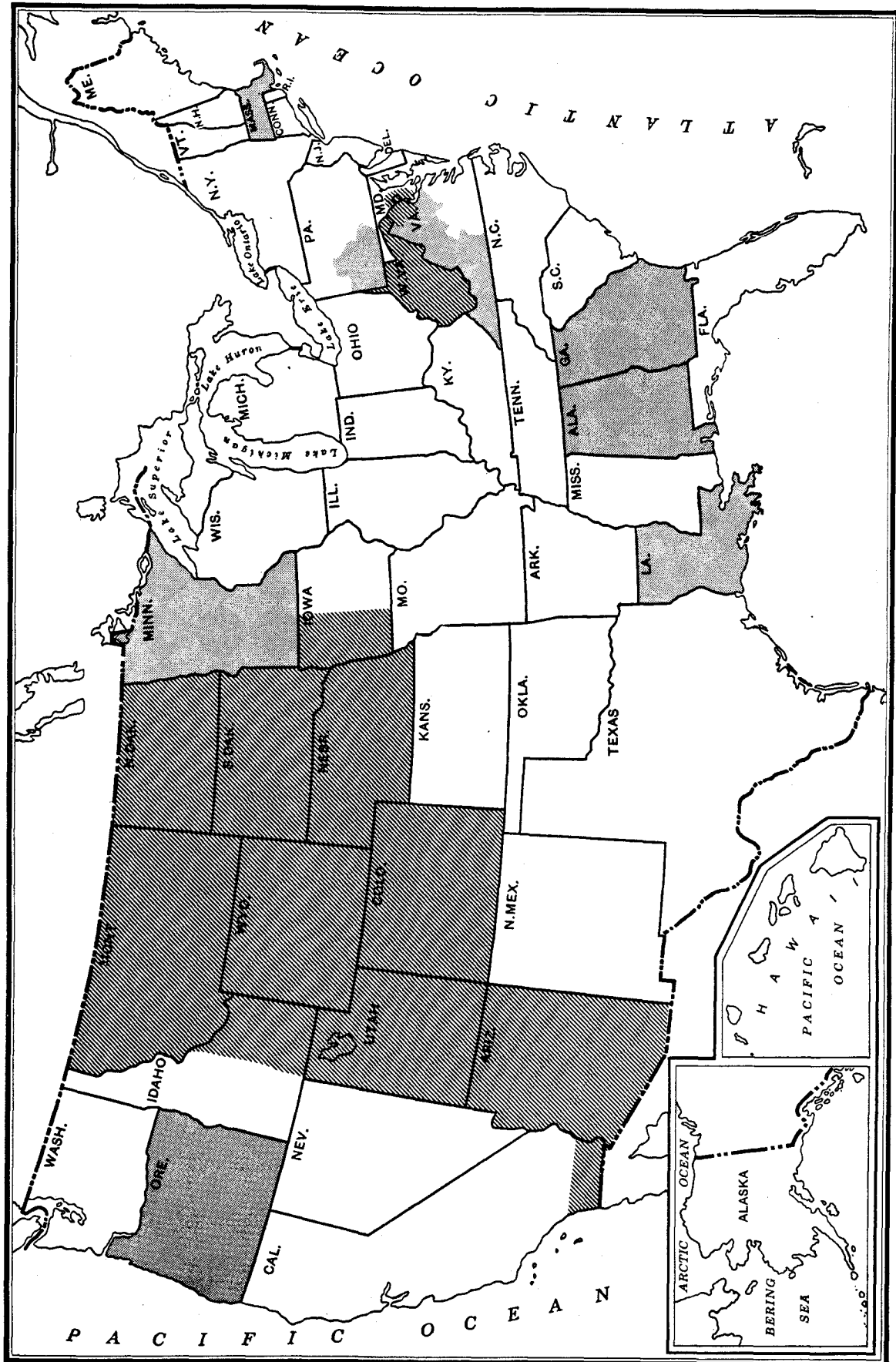


FIGURE 1. Sixteen poison centers participated in the data collection system for varying periods. The lightly stippled areas represent regions served by poison centers reporting data during a portion of 1983. Cross-hatched areas denote reporting during the entire year. (Map adapted from Hammond's Outline Map of the United States.)

TABLE 1. Type of Calls Reported to Participating Centers

Call Type	No.	%
Poison exposure		
Human	251,012	75.6
Animal	4,643	1.4
Unknown	390	0.1
Total	256,045	77.1
Information calls		
Poison	45,047	13.6
Drug	28,143	8.5
Administrative	1,573	0.5
Total	74,763	22.5
Unknown	1,204	0.4
Total	332,012	100.0

TABLE 2. Site of Caller and Site of Exposure, Human Exposure Cases Only

	Site of Caller (%)	Site of Exposure (%)
Residence	84.3	90.8
Health care facility	12.0	0.0
Workplace	1.5	1.9
School	0.5	0.7
Other	0.8	1.9
Unknown	0.9	4.7
Total	100.0	100.0

tainty persisted regarding the magnitude or severity of poisoning problems within the general population.

During the late 1970s the American Association of Poison Control Centers (AAPCC) recognized the need to improve techniques of poison center data collection and reporting to develop a better analysis of patient experience. A data collection committee set out to develop a system capable of providing a uniform database with intercenter compatibility while simultaneously remaining sufficiently unstructured to allow individual center emphasis and specificity. A uniform set of data elements was defined and subsequently adopted by the AAPCC as the minimal data required by poison control centers seeking regional certifica-

tion. Standard definitions for each of these data elements and a reporting form were developed to ensure uniformity of data collection.

In 1982 the Food and Drug Administration offered a one-year fellowship to the chairman of the AAPCC Data Collection Committee to organize the developing data collection components into a functional system, develop the necessary software to collect and manipulate the data, develop a generic classification scheme, conduct and evaluate a two-month pilot test in nine regional poison control centers, and refine the system to make it available to poison control centers nationally in 1984.

The data collection system that evolved was based on a set of standardized, well-defined data elements, a comprehensive (90,000-item) product-specific seven-digit substance identification code (maintained by Micromedex, Inc., updated quarterly and published in Poisindex®), and an 800-900-item generic category code for use in data compilation and when product-specific trade name coding is not possible. A standardized report form, a key component of the system, is perforated vertically, separating into an 8.5" x 11" medical record and a 5.4" x 11" machine-readable data collection portion. The data collection portion is compatible with any National Computer System trans-optic scanner, which "reads" both sides simultaneously, extracting the raw data to magnetic tape, floppy disk, or mainframe computer via bisynchronous telecommunication. A machine readable litho-code on the data collection portion links this section to the same unique serial number on the medical record, thereby allowing subsequent retrieval of the entire medical record for more detailed research, surveillance, or hazard assessment. The medical record provides ample space for written comments and case documentation, and is completed by the poison information specialist at the time the call is received.

Nine poison centers participated in the pilot test of this system in January and February 1983, capturing

TABLE 3. Age and Sex Distribution of Human Poison Exposure Cases

Age (Years)	Male		Female		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%
<1	10,471	51.9	9,245	45.8	454	2.3	20,170	8.0
1	25,648	52.6	22,316	45.7	819	1.7	48,783	19.4
2	28,131	53.1	23,991	45.3	895	1.7	53,017	21.1
3	13,027	54.5	10,450	43.7	423	1.8	23,900	9.5
4	5,466	55.3	4,212	42.6	212	2.1	9,890	3.9
5	2,793	56.1	2,067	41.5	118	2.4	4,978	2.0
6-12	6,720	56.9	4,827	40.9	265	2.2	11,812	4.7
13-17	3,847	41.4	5,301	57.1	142	1.5	9,290	3.7
>17	26,860	43.8	33,429	54.5	999	1.6	61,288	24.4
Unknown	2,331	29.6	2,633	33.4	2,920	37.0	7,884	3.1
Total	125,294	49.9	118,471	47.2	7,247	2.9	251,012	100.0

FIGURE 2. Distribution of poison center call volume by hour of the day.

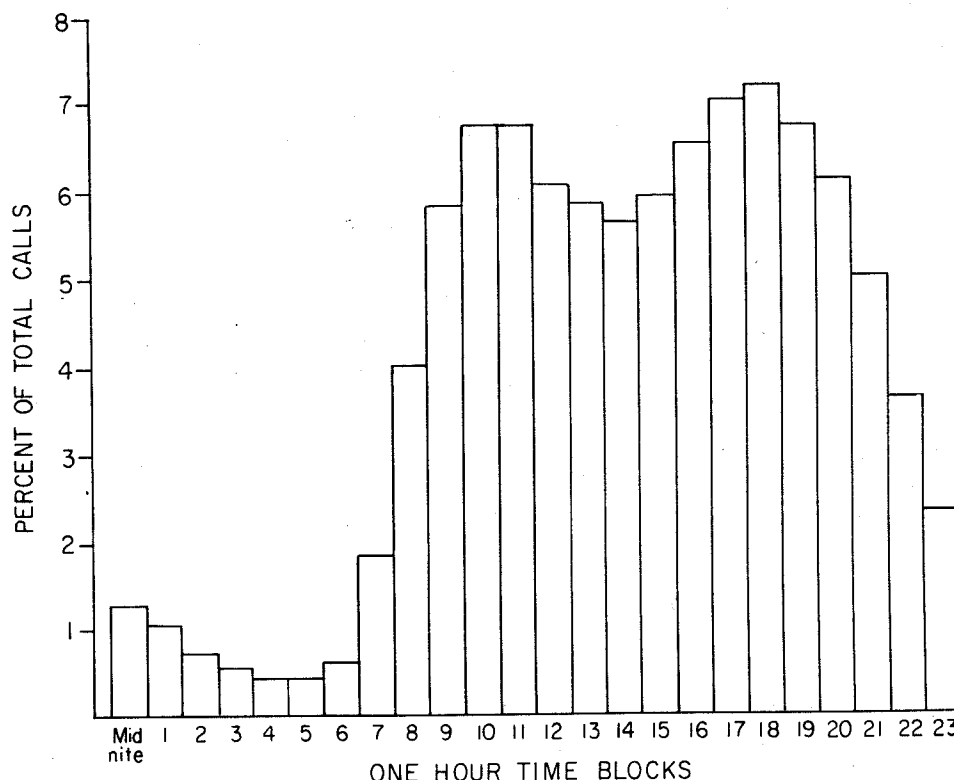


TABLE 4. Frequency of Exposure to Multiple Substances in Human Poison Exposure Cases

No. of Substances	No. of Cases	% of Cases
1	231,589	92.3
2	14,125	5.6
3	1,463	0.6
4	510	0.2
5	157	0.1
6	68	0.0
7	36	0.0
8	17	0.0
Unknown	3,026	1.2
Total	251,012	100.0

TABLE 6. Symptom Assessment at Time of Initial Call to Poison Center for Human Poison Exposures

	No.	%
Asymptomatic	163,527	65.1
Symptomatic, related to exposure	70,644	28.1
Symptomatic, unrelated to exposure	6,031	2.4
Unknown	10,810	4.3
Total	251,012	100.0

Symptoms developed during the subsequent course in 1,394 initially asymptomatic patients. Thus, symptoms related to the exposure eventually developed in 72,038 (28.7%) patients.

TABLE 5. Reason for Exposure for Human Poison Exposure Cases

	No.	%
Accidental		
General	218,752	87.1
Occupational	2,445	1.0
Environmental	1,196	0.5
Misuse*	3,363	1.3
Unknown	253	0.1
Total	225,985	90.0
Intentional		
Suicidal	13,592	5.4
Misuse†	2,598	1.0
Abuse‡	2,262	0.9
Unknown	2,081	0.8
Total	20,534	8.2
Adverse reaction		
Drug	1,459	0.6
Food	884	0.4
Other	176	0.1
Total	2,526	1.0
Unknown	1,967	0.8
Total	251,012	100.0

* Improper use of a substance where therapeutic or beneficial results were intended, e.g., an overdose occurring because both parents gave the same medication to a child and neither was aware (at the time) of the other's action, or a case where misreading the label of a product resulted in an unintended poisoning.

† Intentional incorrect use of a substance where a psychotropic effect was not sought, e.g., intentional excessive dosing to obtain a more rapid or superior pharmacological effect for presumed "therapeutic purposes."

‡ Improper use of a substance where the patient was seeking a psychotropic effect.

TIME BLOCK	REASON FOR EXPOSURE		ADVERSE REACTION
	ACCIDENTAL	INTENTIONAL	
Midnight-4 a.m.	4,398	3,337	342
4-8 a.m.	6,073	1,485	186
8-noon	54,608	2,382	401
noon-4 p.m.	53,279	3,219	389
4-8 p.m.	65,971	4,145	499
8-midnight	36,864	5,486	649
TOTAL	221,193	20,054	2466

FIGURE 3. Distribution of poison center call volume by hour of the day and reason for exposure.

SUMMARY OF 1983 POISON EXPOSURE DATA

Sixteen poison control centers participated in the data collection system for two to 12 months during 1983. (Seven centers contributed an entire year's data.) The 16 participating poison centers serve a total population of 43.1 million (based on 1983 official United States census projections), with each center reporting all poison exposure cases during the months the center participated in the data collection system. However, because of the temporal reporting variations, the data more closely approximate an annual service population of 25.8 million. Figure 1 displays the regions served for a portion of the year (lightly stippled) and for the entire year (cross-hatched). Noting the 234.0 million total United States population during this period, the data presented here represent an estimated 11.0% of the human poison exposures reported to poison control centers in the United States each year. Thus, the 251,012 human poison exposures reported in this database (Table 1) can be extrapolated to predict a nationwide incidence of human poison exposures in excess of 2.3 million. Further extrapolations from the frequency of reported poisonings to the frequency of total poisonings occurring in the United States each year cannot be made from these data alone, as considerable variations in poison center penetration were noted, with reported poisonings ranging from 3.0 to 17.8 per 1,000 persons per year. Furthermore, it is unlikely that even this higher figure reflects 100% reporting of all poisonings in the population

some 22,000 cases each month. Data were processed and tabulations returned to the centers within two weeks at 1/15 the cost of the FDA's previous system. Thus, without stressing the system, data were scanned and analyzed monthly so that no more than six weeks elapsed between the occurrence of a case and its inclusion in the database.

Extensive evaluations of the system were conducted, resulting in system revisions during the final quarter of 1983. As of January 1, 1984, 60 poison control centers are participating in a national data collection system, which expects to capture over 1,000,000 human poison exposures during 1984.

TABLE 7. Distribution of Reason for Exposure by Age, Human Exposure Cases Only

Reason	≤5 Years		6-12 Years		13-17 Years		>17 Years		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Accidental	158,978	63.3	10,899	4.3	5,173	2.1	44,466	17.7	6,473	2.6	225,985	90.0
Intentional	649	0.3	618	0.2	3,893	1.6	14,313	5.7	1,061	0.4	20,534	8.2
Adverse reaction	386	0.2	130	0.1	96	0.0	1,772	0.7	142	0.1	2,526	1.0
Unknown	729	0.3	165	0.0	128	0.1	737	0.3	208	0.1	1,967	0.8
Total	160,738	64.1	11,812	4.7	9,290	3.7	61,288	24.4	7,884	3.1	251,012	100.0

TABLE 8. Distribution of Reason for Exposure and Age for 95 Reported Human Fatalities

	≤5 Years	6-12 Years	13-17 Years	>17 Years	Total
Accidental					
General	7	0	0	13	20
Misuse	3	0	0	2	5
Occupational	0	0	0	1	1
Total	10	0	0	16	26
Intentional					
Suicide	0	0	2	58	60
Misuse	0	0	0	3	3
Abuse	0	0	1	3	4
Total	0	0	3	64	67
Adverse reaction	0	0	0	1	1
Unknown	0	0	0	1	1
Total	10	0	3	82	95

served, as a previous study in this region revealed only 65% of all poisonings were reported to that poison control center.¹

The 251,012 human poison exposures reported to the AAPCC National Data Collection System in 1983 constitute the largest annual poison exposure database ever compiled in the United States. Although a smaller number of animal exposures and information calls were also reported (Table 1), this report focuses on the 251,012 human exposure cases, 90.8% of which occurred in the home (Table 2). Table 3 delineates the age and sex distribution of poison exposure victims, and emphasizes the predominance of children under 6 years of age (64%). In the younger age groups a somewhat greater proportion of males were involved in poisonings, but this gender pattern was clearly reversed in the teenage and adult exposures. Peak call volumes to poison control centers were noted at 10 to 11 AM and 5 to 7 PM, although call frequency remained consistently high between 9 AM and 10 PM, with 81% of calls logged during this 13-hour period (Fig. 2).

A single substance was implicated in 92.3% of cases, and only 2.1% of patients were exposed to more than two possibly poisonous drugs or products (Table 4). Most cases of human exposure were acute (98.6%), as were most poison-related fatalities (94.7%). (Chronic exposures were arbitrarily defined as repeated exposures to the same toxic substance or a single exposure lasting longer than eight hours.)

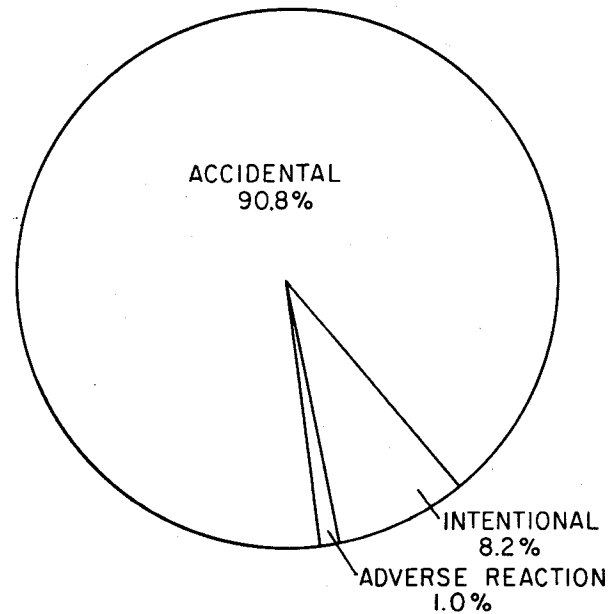


FIGURE 4. Reason for exposure.

The vast majority of exposures were accidental (90%); suicide attempts represented 5.4% of cases (Table 5). Whereas accidental poisonings outnumbered both intentional poisonings and adverse reactions in all age groups (Table 7), the difference was less profound in the teenage and adult cases. In contrast, of

TABLE 9. Distribution of Route of Exposure by Patient Management Site for Human Poison Exposure Cases

	Non-health Care Facility		Health Care Facility		Unknown Site		Total	
	No.	%	No.	%	No.	%	No.	%*
Ingestion	153,415	76.0	40,913	20.3	7,664	3.8	201,992	80.5
Inhalation	6,444	55.4	4,327	37.2	861	7.4	11,632	4.6
Ophthalmic	10,093	73.1	2,893	21.0	823	6.0	13,809	5.5
Dermal	11,328	75.1	2,968	19.7	788	5.2	15,084	6.0
Bites and stings	9,458	68.0	3,563	25.6	894	6.4	13,915	5.5
Parenteral	183	25.4	473	65.6	65	9.0	721	0.3
Other/unknown	1,446	61.8	840	35.9	55	2.3	2,341	0.9

* Multiple routes of exposure were observed in many poison exposure victims. Percent reflects percent of human exposures with each route of ingestion, thus total percentage exceeds 100, and total number of routes of exposure exceeds 251,012 (number of human exposure victims).

TABLE 10. Management Site of Human Poison Exposure Cases

	No.	%
Non-health care facility	182,473	72.7
Health care facility		
Already there at time		
of call to poison center	25,895	10.3
Referred in by poison center	31,255	12.5
Other/unknown	11,389	4.5
Total	251,012	100.0

TABLE 11. Medical Outcome of Human Poison Exposure Cases by Patient Age*

	Age (Years)			
	≤5 (%)	6-12 (%)	13-17 (%)	>17 (%)
No effect	48.7	2.3	1.0	5.2
Minor effect	17.7	2.3	2.2	15.2
Major effect	0.7	0.2	0.5	3.9

* For patients with known medical outcome and age.

TABLE 12. Distribution of Medical Outcome by Reason for Exposure for Human Poison Exposure Victims

	Accidental		Intentional		Adverse Reaction		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No effect	127,898	96.9	3,012	2.3	322	0.2	700	0.5	131,932	52.6
Minor effect	75,092	85.5	10,237	11.7	1,756	2.0	754	0.9	87,839	35.0
Major effect	7,387	57.1	5,128	39.6	225	1.7	205	1.6	12,945	5.2
Death	26	27.4	67	70.5	1	1.1	1	1.1	95	0.0
Unknown	15,582	85.6	2,090	11.5	222	1.2	307	1.7	18,201	7.2
Total	225,985	90.0	20,534	8.2	2,526	1.0	1,967	0.8	251,012	100.0

the 95 human poisoning fatalities reported, this ratio was reversed among the adult deaths, with four times as many deaths resulting from intentional as from accidental exposures (Table 8). The striking daytime predominance of accidental poisonings is not observed in the intentional exposures (Fig. 3).

Ingestions accounted for 80.5% of reported poison exposures (Table 9), followed in frequency by dermal, ophthalmic, bite and sting, inhalation, and parenteral routes. The 95 reported fatalities included 76 ingestions (80%), 11 inhalational exposures (11.6%), two parenteral exposures (2.1%), two envenomations (2.1%), two combined inhalation and ingestion exposures (2.1%), and in two patients, unknown routes of exposure (2.1%).

Table 6 shows the symptom assessment at the time of the initial call to the participating poison center. In addition to the 28.1% of patients with symptoms related to the poisoning at the time of the initial call, symptoms developed subsequently in 1,394 initially asymptomatic patients. Thus, overall, toxin-related symptoms developed in 28.7% of reported patients.

The majority of cases reported to poison centers were managed in a non-health care facility (72.7%), usually at the site of the exposure, the patient's own

home (Table 10). Treatment was rendered in a health care facility in 22.8% of patients, and of these, 48.6% were treated and released within four hours, 8.5% were treated and observed for more than four hours but not admitted, and 42.9% were admitted.

Table 11 compares medical outcome and reason for exposure, demonstrating the proportionally greater involvement of intentional exposures in cases with a major effect or fatality. Thirty-five per cent of patients had a minor effect (non-life-threatening symptoms followed the exposure, resolved within 24 hours, and resulted in no residual disability). A major effect was observed in 5.2% of cases (symptoms lasted more than 24 hours, were life-threatening, or resulted in disfigurement or residual disability). Ninety-five fatalities were documented and verified. Table 11 displays the medical outcome of the human poison exposure victims distributed by age, emphasizing the more severe outcome observed in the older age groups.

Table 14 outlines the use of initial decontamination procedures and specific antidotes in the treatment of the patients reported in this database. Ipecac syrup was administered in 13.4% of cases, more frequently outside a health care facility (especially in children, Table 13). (The reader is cautioned to interpret fre-

TABLE 13. Ipecac Administration by Site and Age, of 251,012 Human Exposure Cases

Age (Years)	Site						Total	
	Non-health Care Facility		Health Care Facility		Unknown		No.	%
	No.	%	No.	%	No.	%		
<1	734	53.7	615	45.0	19	1.4	1,368	4.1
1	7,157	70.0	2,967	29.0	96	0.9	10,220	30.4
2	5,545	69.8	2,305	29.0	93	1.2	7,943	23.6
3	2,481	72.8	879	25.8	50	1.5	3,410	10.1
4	962	74.5	316	24.5	14	1.1	1,292	3.8
5	385	70.0	151	27.8	8	1.5	544	1.6
6-12	444	62.6	251	35.4	14	2.0	709	2.1
13-17	226	13.5	1,415	84.4	36	2.1	1,677	5.0
>17	698	11.8	5,053	85.5	159	2.7	5,910	17.6
Unknown	199	34.6	340	59.1	36	6.3	575	1.7
Total	18,831	56.0	14,292	42.5	525	1.6	33,648	100.0

Overall, 13.4% of the 251,012 human exposures reported were treated with ipecac syrup.

quencies cited in Table 14 as minimum frequencies because of the limitations of telephone verification of therapies rendered.)

The 30 most frequent plant ingestions are listed in Table 15. Note the presence of *Philodendron* and *Dieffenbachia* (two insoluble oxalate-containing genera, and popular indoor plants) at the top of the list.

Finally, a summary of the 95 fatal exposures is presented in Table 16, listed by generic category. Substances implicated in multiple fatalities included cyclic antidepressants (16), acetaminophen and acetaminophen combination formulations (13), ethanol (11), aspirin and aspirin combination formulations (6), phenothiazines (5), carbon monoxide (4), theophylline (4),

TABLE 14. Therapy Provided in Human Poison Exposure Cases

	No.	%*
Initial decontamination		
Dilution	106,280	42.3
Irrigation/washing	44,226	17.6
Ipecac syrup	33,648	13.4
Demulcent	12,784	5.1
Activated charcoal	9,952	4.0
Cathartic	9,376	3.7
Gastric lavage	3,921	1.6
Other emetic	947	0.4
Specific antidote administration		
N-acetylcysteine (PO)	1,853	0.7
Naloxone	434	0.2
Antivenin/antitoxin	147	0.1
Atropine	131	0.1
Dimercaprol (BAL)	122	0.0
Physostigmine	97	0.0
Methylene blue	90	0.0
N-acetylcysteine (IV)	67	0.0
Deferoxamine	67	0.0
Ethanol	43	0.0
Vitamin K	33	0.0
Glucagon	29	0.0
Penicillamine	28	0.0
Cyanide antidote kit	27	0.0
Pralidoxime (2-PAM)	25	0.0
Pyridoxine	11	0.0
EDTA	3	0.0
Hydroxocobalamin	3	0.0
Neostigmine	3	0.0
Thioctic acid	1	0.0
Measures to enhance elimination		
Urinary alkalization		
(with or without diuresis)	72	0.0
Hemodialysis	37	0.0
Hemoperfusion (charcoal or resin)	33	0.0
Forced diuresis	30	0.0
Exchange transfusion	14	0.0
Urinary acidification		
(with or without diuresis)	9	0.0
Peritoneal dialysis	2	0.0

* Per cent of 251,012 human exposure cases receiving each treatment.

TABLE 15. Plants Most Frequently Involved in Human Exposure Cases Reported to Poison Centers

Plant	No. of Exposures
<i>Philodendron</i> spp. Philodendron	2010
<i>Dieffenbachia</i> spp. Dumbcane	1009
<i>Euphorbia pulcherrima</i> Poinsettia	714
<i>Crassula argentea</i> Jade plant	630
<i>Pyracantha</i> spp. Firethorn	586
<i>Ilex</i> spp. Holly	533
<i>Brassaia actinophylla</i> Schefflera	478
<i>Phytolacca americana</i> or <i>rigida</i> Pokeweed	347
<i>Anthericum</i> and <i>Chlorophytum</i> Spiderplant	242
<i>Lonicera</i> spp. Honeysuckle	213
<i>Ficus elastica</i> Rubber plant	211
<i>Nephtytis</i> spp. Arrowhead vine	203
<i>Capsicum annuum conoides</i> "Fiesta" pepper	200
<i>Episcia reptans</i> Flame violet	199
<i>Scindapsus aureus</i> or <i>pictus</i> Pothos	199
<i>Aloe</i> spp. Medicine aloe	179
<i>Asparagus officinalis</i> Asparagus fern	169
<i>Ficus benjamina</i> Weeping fig tree	151
<i>Solanum dulcamara</i> Climbing nightshade	149
<i>Toxicodendron radicans</i> Poison ivy	144
<i>Rhododendron</i> spp. Rhododendron, azalea	141
<i>Pittosporum tobira</i> Pittosporum	141
<i>Mahonia</i> spp. Oregon grape	138
<i>Quercus</i> spp. Oak	125
<i>Nerium oleander</i> Oleander	125
<i>Chrysanthemum</i> spp. Chrysanthemum	122
<i>Solanum pseudocapsicum</i> Jerusalem cherry	121
<i>Phoradendron flavescens</i> Mistletoe	121
<i>Begonia</i> spp. Begonia	119
<i>Sorbus</i> spp. Mountain-ash	111

cocaine (4), monoamine oxidase inhibitors (3), cardiac glycosides (3), iron (3), barbiturates (3), benzodiazepines (3), cyanide (3), ethylene glycol (3), hydrocarbons (2), and methanol (2). Tables 17 and 18 provide comprehensive demographic data on patient age, reason for exposure, medical outcome, and use of a health care facility for each category of poisonous substances. Table 17 focuses on non-pharmaceuticals; Table 18 focuses on drugs. A small percentage of cases involved exposure to multiple substances simultaneously, thus producing an occasional unexpected medical outcome that was probably related to the concomitantly ingested substance instead. (When interpreting Tables 17 and 18, note that the percentages of unknowns were deleted in the age, reason, and medical outcome categories; thus, the listed data total less than 100% for each category.)

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- Bradford DC, Veltri JC. Adequacy and Validity of Data about Acute Poisonings. NCHSR Final Report HS 03994-01A1, November 1981:49.

TABLE 16. Summary of Fatal Exposures*

Ages†	Reason‡	Exposure Type	Route of Exposure	Substance 1	Substance 2
Alcohols					
>17	int suicide	acute	ingestion	ethylene glycol	ethanol
>17	int suicide	acute	ingestion	acetaminophen	ethanol
>17	int suicide	acute	ingestion	acetaminophen and codeine	ethanol
>17	int suicide	acute	ingestion	theophylline	ethanol
>17	int suicide	acute	ingestion	phenelzine (MAOI)	ethanol
21	int abuse	acute	ingestion	ethanol	
27	int suicide	acute	ingestion	desipramine	ethanol
29	unknown	acute	ingestion	thioridazine	ethanol
30	int suicide	acute	ingestion	aspirin combination formulation	ethanol
34	int suicide	acute	ingestion	amitriptyline	ethanol
42	int suicide	acute	ingestion	benzodiazepines	ethanol
67	int suicide	acute	ingestion	ethylene glycol	isopropyl alcohol, 91%
Automotive/aircraft/boat products					
24	acc gen	acute	ingestion	octane booster (aniline oil + methanol)	
40	acc gen	acute	ingestion	octane booster (aniline oil + methanol)	
Bites and envenomations					
>17	acc gen	acute	bite/sting	brown recluse spider bite	
>17	acc gen	acute	bite/sting	rattlesnake	
Chemicals					
>17	int suicide	acute	ingestion	ethylene glycol	
>17	int suicide	acute	ingestion	ethylene glycol	ethanol
>17	int suicide	acute	ingestion	sulfuric acid	
>17	int suicide	acute	ingestion	sodium bichromate antircorrosive	
>17	int suicide	acute	ingestion	cyanide	
>17	acc gen	acute	inhalation	cyanide (smoke inhalation)	
>17	int suicide	acute	inhalation	cyanide	
32	acc occup	acute	inhalation	formaldehyde	
67	int suicide	acute	ingestion	ethylene glycol	aluminum sulfate
73	acc gen	acute	inhalation	iodine (inhaled fumes)	isopropyl alcohol, 91%
Cleaning Substances					
9 mo	acc gen	acute	ingestion	pine oil disinfectant	
>17	int suicide	acute	ingestion	acid (tile cleaner)	
>17	acc gen	acute	inhalation	liquid drain opener (acid)	
88	acc gen	acute	ingestion	laundry detergent	
Cosmetics/personal care products					
>17	acc gen	acute	ingestion	denture cleanser powder (alkali)	

Fumes/gases/vapors									
18 mo	acc gen	acute	inhalation	carbon monoxide					
>17	int suicide	acute	inhalation	carbon monoxide					haloperidol
>17	int suicide	acute	ing/inhal	carbon monoxide					
>17	int suicide	acute	inhalation	hydrogen sulfide					
28	acc gen	acute	inhalation	carbon monoxide (house fire)					
Heavy metals									
32	acc occup	acute	inhalation	formaldehyde					aluminum sulfate
Herbicides									
43	int suicide	acute	ingestion	paraquat					
Hydrocarbons									
30	acc misuse	chronic	inhalation	petroleum distillate					
58	acc gen	acute	ingestion	lamp oil					
Insecticides/pesticides									
<5	acc gen	acute	ingestion	organophosphate					
59	acc gen	acute	inhalation	carbamate insecticide					
Analgesics									
8 mo	acc misuse	chronic	ingestion	acetaminophen (pediatric formulation)					
17	int suicide	acute	ingestion	acetaminophen					ethanol
>17	int suicide	acute	ingestion	acetaminophen					acetaminophen
>17	int suicide	acute	ingestion	amitriptyline					
>17	int suicide	acute	ingestion	aspirin (adult formulation)					ethanol
>17	int suicide	acute	ingestion	acetaminophen and codeine					
>17	int suicide	acute	ingestion	acetaminophen					
>17	adrx drug	acute	parenteral	sarapin					
>17	int suicide	acute	ingestion	pentazocine/aspirin					oxycodone/aspirin
>17	int suicide	acute	ingestion	acetaminophen and propoxyphene					
>17	int suicide	acute	ingestion	secobarbital					hydromorphone
>17	int suicide	acute	ingestion	acetaminophen					aspirin
>17	int suicide	acute	ingestion	acetaminophen, adult formulation					
>17	int suicide	acute	ingestion	hydrocodone/acetaminophen					
24	int misuse	acute	ingestion	salicylate					
30	int suicide	acute	ingestion	aspirin combination formulation					ethanol
33	int suicide	acute	ingestion	colchicine					
36	int suicide	acute	ingestion	thioridazine					acetaminophen/propoxyphene
44	int suicide	acute	ingestion	oxycodone/acetaminophen					thioridazine
58	int suicide	acute	ingestion	acetaminophen					

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TABLE 16. Continued

Age†	Reason‡	Exposure Type	Route of Exposure	Substance 1	Substance 2
Antidepressants					
<1	acc gen	acute	ingestion	imipramine	
16	int suicide	acute	ingestion	imipramine	
>17	int suicide	acute	ingestion	amitriptyline	
>17	int suicide	acute	ingestion	phenelzine (MAOI)	ethanol
>17	int suicide	acute	ingestion	amoxapine	
>17	int suicide	acute	ingestion	nortriptyline	
>17	int suicide	acute	ingestion	amitriptyline	acetaminophen
>17	int suicide	acute	ingestion	amitriptyline	phenelzine (MAOI)
>17	int suicide	acute	ingestion	amoxapine	amphetamines
>17	int suicide	acute	ingestion	cyclic antidepressant/benzodiazepine	
>17	int suicide	acute	ingestion	amitriptyline	
>17	int suicide	acute	ingestion	doxepin	
>17	int suicide	acute	ingestion	phenelzine (MAOI)	temazepam
19	int suicide	acute	ingestion	doxepin	
27	int suicide	acute	ingestion	desipramine	ethanol
34	int suicide	acute	ingestion	amitriptyline	ethanol
43	int suicide	acute	ingestion	desipramine	
77	int suicide	acute	ingestion	amoxapine	benzodiazepines
Antimicrobials					
3 mo	acc misuse	acute	parenteral	chloramphenicol (gray baby syndrome)	
22	int suicide	acute	ingestion	isoniazid	
Asthma therapies					
>17	int suicide	acute	ingestion	theophylline (long-acting)	
>17	int suicide	acute	ingestion	theophylline	ethanol
>17	int suicide	acute	ingestion	theophylline (long-acting)	
40	int suicide	acute	ingestion	theophylline	
Cardiovascular drugs					
>17	int suicide	acute	ingestion	reserpine	
>17	acc gen	chronic	ingestion	digoxin	
20	int suicide	acute	ingestion	disopyramide	
67	acc misuse	chronic	ingestion	digoxin	
76	int suicide	acute	ingestion	digoxin	
Cough and cold preparations					
2 mo	acc misuse	chronic	ingestion	pseudoephedrine	

Electrolytes/minerals							
16 mo	acc gen	acute	ingestion	iron			
17 mo	acc gen	acute	ingestion	ferrous sulfate			
17	int suicide	acute	ingestion	ferrous sulfate			
Sedatives/hypnotics/antipsychotics							
>17	int suicide	acute	ing/inhal	carbon monoxide	haloperidol		
>17	int suicide	acute	ingestion	sodium butabarbital			
>17	int suicide	acute	ingestion	phenelzine (MAOI)	temazepam		
>17	int suicide	acute	ingestion	barbiturates			
>17	int suicide	acute	ingestion	secobarbital	hydromorphone		
29	unknown	acute	ingestion	thioridazine	ethanol		
35	int suicide	acute	ingestion	thioridazine			
36	int suicide	acute	ingestion	thioridazine	acetaminophen/propoxyphene		
42	int suicide	acute	ingestion	benzodiazepines	ethanol		
44	int suicide	acute	ingestion	oxycodone/acetaminophen	thioridazine		
77	int suicide	acute	ingestion	amoxapine	benzodiazepines		
Stimulants and street drugs							
13-17	int abuse	acute	unknown	cocaine			
>17	int abuse	acute	ingestion	cocaine			
>17	int suicide	acute	ingestion	amoxapine	amphetamines		
>17	int misuse	acute	ingestion	caffeine and phenylpropanolamine look-alike			
>17	int suicide	acute	ing/inhal	marijuana	cocaine		
>17	int misuse	acute	ingestion	unknown street drugs ("speed")			
>17	int abuse	acute	unknown	cocaine	other street drugs		
Topical agent							
1.5	acc gen	acute	ingestion	oil of wintergreen			
Unknown drug							
>17	int suicide	acute	ingestion	unknown drugs			

* Cases are listed twice if more than one substance was involved in exposure.

† Age in years unless otherwise indicated; specific age provided where known.

‡ Reason for exposure may be either accidental general (acc gen), accidental misuse (acc misuse), accidental occupational (acc occup), intentional suicide (int suicide), intentional misuse (int misuse), intentional abuse (int abuse), or adverse reaction to a drug (adrx drug).

TABLE 17. Demographic Profile of Exposure Cases by Generic Category of Substances and Products: Non-pharmaceuticals

	No. of Exposures	Age (Years)				Reason			Treated in Health Facility (%)	Medical Outcome (Effect)		
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)	None (%)		Minor (%)	Major (%)	Death (No.)
Adhesives/glues/cements/pastes	1,993	72.2	18.5	3.9	95.1	0.5	0.2	15.8	50.4	38.1	2.1	0
Alcohols												
Ethanol	6,016	81.3	13.4	2.0	83.3	13.0	0.4	34.1	41.7	41.9	8.7	11
Isopropanol } excluding rubbing alcohol	1,399	88.9	7.1	1.3	95.0	2.2	0.2	12.1	60.1	32.0	1.6	0
Methanol	283	73.1	18.0	3.5	90.1	3.2	0.0	33.9	48.8	31.8	9.2	0
Rubbing alcohol												
Ethanol	501	93.2	4.4	0.6	97.6	1.0	0.0	11.2	66.3	27.5	0.4	0
Isopropanol	361	91.1	7.2	0.3	95.6	3.0	0.0	23.3	56.0	33.0	4.2	1
Unknown type	199	84.9	9.5	0.5	95.0	1.0	0.0	14.1	57.3	26.1	1.5	0
Other/unknown	442	79.4	12.9	1.6	92.3	1.8	0.2	17.0	49.8	38.0	2.9	0
Total	9,201	83.2	11.8	1.7	87.3	9.2	0.3	27.8	47.3	38.5	6.6	12
Arts and crafts/office supplies	2,103	89.7	5.3	1.5	97.0	0.3	0.2	4.1	83.5	10.6	0.3	0
Automotive/aircraft/boat products												
Glycols	435	64.1	25.5	2.1	94.0	1.4	0.5	29.9	43.0	35.2	7.8	0
Methanol	117	73.5	18.8	0.9	92.3	1.7	0.0	50.4	49.6	31.6	7.7	2
Other/unknown	413	74.1	18.6	2.2	96.9	0.2	0.0	24.0	43.8	38.7	3.4	0
Total	965	69.5	21.8	2.0	95.0	0.9	0.2	29.8	44.1	36.3	5.9	2
Batteries												
Penlight/flashlight/dry cells	90	85.6	10.0	2.2	98.9	0.0	0.0	8.9	58.9	35.6	3.3	0
Automotive	122	51.6	42.6	3.3	98.4	0.0	0.0	29.5	17.2	59.8	14.8	0
Button batteries	269	90.3	5.2	1.5	94.8	1.5	0.4	71.7	69.9	18.6	2.2	0
Other/unknown	59	81.4	15.3	0.0	96.6	0.0	0.0	30.5	59.3	32.2	1.7	0
Total	540	79.8	15.6	1.9	96.5	0.7	0.2	47.2	55.0	32.2	5.2	0
Bites and envenomations												
Small mammals	517	65.4	21.9	6.8	93.6	0.2	0.4	36.2	27.1	55.7	4.1	0
Snakes indigenous to U.S.												
Rattlesnakes	215	55.8	18.6	5.6	85.6	0.5	0.0	70.7	6.5	17.7	50.2	1
Copperhead	22	68.2	18.2	4.5	90.9	0.0	0.0	86.4	9.1	40.9	40.9	0
Coral	5	40.0	40.0	0.0	80.0	0.0	0.0	80.0	20.0	0.0	60.0	0
Cottonmouth	6	15.0	33.3	16.7	100.0	0.0	0.0	50.0	0.0	0.0	66.7	0
Unknown crotalic	16	68.8	12.5	18.8	100.0	0.0	0.0	81.3	18.8	25.0	50.0	0
Nonpoisonous snake	169	65.1	27.2	3.0	94.7	0.0	1.2	30.8	33.1	53.8	1.8	0
Unknown type of snake	180	47.2	31.7	4.4	77.2	1.1	7.2	37.8	24.4	35.6	6.7	0
Exotic snakes	23	60.9	26.1	8.7	91.3	0.0	0.0	34.8	21.7	56.5	13.0	0
Other/unknown reptile	81	59.3	24.7	6.2	96.3	0.0	1.2	32.1	23.5	53.1	12.3	0
Ant/fire ant	450	65.1	32.7	1.3	99.1	0.0	0.0	18.0	4.2	79.6	8.7	0
Bee/wasp/hornet	2,596	68.3	27.7	1.3	97.3	0.0	0.2	13.8	5.4	77.2	8.7	0
Black widow spider	1,370	61.5	27.5	4.3	92.8	0.6	0.7	25.0	23.3	50.7	11.2	0
Brown recluse spider	250	40.0	40.8	4.8	79.2	0.4	3.2	48.8	5.6	28.4	38.0	1

Other spider	263	65.8	28.1	0.8	95.1	0.0	0.0	12.9	14.4	69.6	6.5	0
Caterpillars/centipedes	115	66.1	31.3	2.6	99.1	0.0	0.0	17.4	2.6	77.4	12.2	0
Other/unknown spider/insect	2,948	55.7	39.0	1.6	97.0	0.1	0.3	27.9	6.9	66.8	14.6	0
Fish stings	190	65.8	26.8	4.2	96.3	0.5	0.5	30.5	3.2	66.3	18.4	0
Coelenterate stings	32	53.1	34.4	3.1	93.8	0.0	3.1	50.0	0.0	43.8	43.8	0
Mosquito	56	71.4	21.4	5.4	96.4	0.0	0.0	33.9	0.0	75.0	14.3	0
Scorpion	1,850	65.8	27.0	4.1	95.6	0.4	1.1	19.8	7.4	74.4	6.4	0
Tick	295	55.9	24.1	2.7	78.0	0.0	4.1	15.6	33.9	28.8	6.1	0
Total	11,676	61.9	30.4	2.8	94.8	0.2	0.7	24.2	10.9	64.9	11.6	2
Building/construction supplies	499	66.5	21.0	2.6	90.6	0.2	0.8	18.6	48.3	29.7	6.8	0
Chemicals	711	85.8	8.9	1.5	95.4	1.5	0.1	14.5	54.1	36.0	2.4	0
Acetone (excluding nail polish removers)												
Acids	1,868	53.4	30.9	4.6	88.7	0.8	0.7	34.4	20.6	50.1	11.7	1
Alkali	105	57.1	33.3	3.8	96.2	1.9	0.0	54.3	15.2	57.1	24.8	0
Borates/boric acid (excluding topicals and insecticides)	532	75.6	13.2	4.3	93.6	0.4	0.6	19.4	61.8	23.7	32.0	0
Chlorates (excluding matches and fireworks)	42	76.2	11.9	2.4	88.1	2.4	2.4	9.5	52.4	31.0	0.0	0
Cyanide (excluding rodenticides)	105	33.3	38.1	9.5	77.1	0.0	3.8	49.5	16.2	42.9	11.4	3
Dioxin	18	5.6	33.3	16.7	55.6	0.0	0.0	16.7	33.3	5.6	5.6	0
Formaldehyde/formalin	365	54.2	24.4	3.8	80.8	1.1	1.9	25.2	28.2	40.0	7.1	1
Glycols (excluding automotive products)	1,177	85.0	9.3	1.4	94.6	1.0	0.4	11.4	67.8	22.8	1.4	3
Ketones	340	77.1	15.9	2.1	94.4	0.0	0.3	25.3	42.6	42.1	4.7	0
Methylene chloride (excluding paint strippers)	303	63.0	24.8	4.3	89.1	1.3	0.7	27.7	29.4	53.1	6.3	0
Nitrates and nitrites (excluding medications and abused substances)	551	81.1	9.6	1.8	90.6	2.5	0.7	11.8	68.4	18.3	2.4	0
Phenol/creosote (excluding disinfectants)	515	68.2	21.6	2.9	92.8	1.2	0.2	21.6	36.9	42.3	9.3	0
Strychnine (excluding rodenticides)	22	18.2	27.3	18.2	63.6	4.5	0.0	22.7	27.3	18.2	4.5	0
Toluene diisocyanate	72	33.3	47.2	0.0	80.6	0.0	0.0	44.4	11.1	44.4	22.2	0
Other	3,438	73.6	14.7	33.7	90.3	1.5	0.7	18.3	57.9	25.3	4.2	2
Total	10,164	70.3	18.1	3.3	90.7	1.2	0.6	21.7	47.9	33.2	5.8	10

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Table 17, continued

	No. of Exposures	Age (Years)				Reason			Treated in Health Facility (%)	Medical Outcome (Effect)				
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)	None (%)		Minor (%)	Major (%)	Death (No.)		
Cleaning substances														
Ammonia cleaners	1,373	69.6	23.8	1.9	94.7	0.7	0.2	24.5	32.7	53.1	5.8	0		
Bleaches (household)														
Hypochlorite-containing	3,681	76.4	18.6	1.9	96.5	0.9	0.4	21.0	39.6	50.3	2.8	0		
Other/unknown	305	75.1	15.7	1.0	94.8	0.7	0.3	11.1	53.4	30.5	3.6	0		
Cleansers														
Anionic/nonionic	450	93.3	3.8	0.9	98.2	0.7	0.0	6.4	67.1	28.0	0.7	0		
Other/unknown	99	83.8	12.1	2.0	99.0	0.0	0.0	13.1	61.6	30.3	3.0	0		
Disinfectants (household)														
Hypochlorite-containing	582	60.8	30.1	2.7	94.0	1.0	0.3	25.8	33.2	49.3	8.6	0		
Phenol	493	82.8	11.6	2.4	96.3	1.2	0.2	16.0	51.9	39.1	2.0	0		
Pine oil	66	89.4	9.1	0.0	98.5	0.0	0.0	25.8	60.6	30.3	1.5	1		
Other/unknown	55	74.5	16.4	3.6	94.5	3.6	0.0	20.0	47.3	40.0	0.0	0		
Electric dishwasher detergent														
Alkali	801	91.6	4.6	0.9	96.9	0.0	0.1	9.2	64.9	26.3	1.6	0		
Other/unknown	134	92.5	4.5	0.0	97.8	0.7	0.0	7.5	62.7	28.4	1.5	0		
Fabric softeners														
Cationic	204	93.6	2.9	1.0	97.1	0.5	0.0	7.4	72.1	23.0	1.5	0		
Other/unknown	23	91.3	4.3	4.3	100.0	0.0	0.0	0.0	73.9	26.1	0.0	0		
Glass cleaners (household)														
Hand dishwashing detergents	188	86.7	10.6	1.1	98.4	0.5	0.0	9.0	59.6	31.9	1.1	0		
Industrial cleaners	1,575	90.4	7.2	0.8	97.5	0.6	0.1	4.7	53.6	40.5	0.7	0		
Acids														
Alkali	235	63.8	28.9	4.3	95.7	1.7	0.0	31.5	21.7	60.0	8.1	1		
Other/unknown	186	76.3	18.8	1.6	96.8	0.5	0.0	32.2	38.7	41.4	11.3	0		
Laundry detergents														
Anionic/nonionic	1,121	90.1	6.8	1.1	98.3	0.4	0.1	9.3	57.8	36.4	1.3	0		
Alkali	596	92.4	2.7	1.7	97.7	0.0	0.2	12.2	55.2	35.7	3.0	1		
Other/unknown	187	89.3	5.9	2.1	96.8	0.0	0.0	5.9	61.5	29.9	1.1	0		
Miscellaneous cleaners														
Acid	66	66.7	25.8	3.0	97.0	0.0	1.5	28.8	27.3	59.1	7.6	0		
Alkali	1,624	86.2	9.7	1.7	96.9	0.6	0.2	11.2	57.0	35.3	2.5	0		
Anionic/nonionic	3,569	89.0	6.4	1.5	97.2	0.4	0.3	9.0	60.2	32.8	0.8	0		
Cationic	799	81.0	11.8	2.1	95.7	0.5	0.6	19.1	52.2	34.5	4.0	0		
Methanol/glycols	34	79.4	5.9	5.9	94.1	0.0	0.0	11.8	58.8	26.5	0.0	0		
Isopropanol	945	91.6	6.5	0.5	95.7	3.2	0.2	17.8	61.1	31.3	2.2	0		
Ethanol	134	92.5	4.5	0.0	92.5	4.5	0.7	10.4	59.7	32.1	3.0	0		
Other/unknown	396	84.1	9.1	2.5	96.5	0.3	0.3	12.4	63.6	24.5	2.5	0		
Oven cleaners														
Alkali	589	62.0	29.2	2.7	95.2	0.5	0.5	28.4	20.5	56.9	10.5	0		
Other/unknown	31	45.2	25.8	13.3	87.1	0.0	0.0	16.1	38.7	35.5	6.5	0		
Rust removers														
Hydrofluoric acid	24	62.5	20.8	4.2	83.3	4.2	0.0	58.3	20.8	37.5	20.8	0		
Other acid	70	67.1	24.3	4.3	97.1	1.4	0.0	24.3	27.1	57.1	7.1	0		
Other/unknown	7	71.4	28.6	0.0	100.0	0.0	0.0	57.1	28.6	14.3	28.6	0		

Halogenated hydrocarbon	97	82.5	11.3	2.1	95.9	0.0	0.0	20.6	57.7	29.9	2.1	0
Toilet bowl cleaners												
Acid	355	73.0	17.7	3.7	97.2	0.8	0.0	25.1	38.9	48.4	5.1	0
Other/unknown	72	69.4	15.3	0.0	91.7	0.0	0.0	13.9	59.7	19.4	2.8	0
Wall/floor/tile cleaners												
Alkali	558	82.8	14.3	1.3	97.0	0.7	0.7	22.0	34.6	53.0	5.9	0
Antionic/nonionic	248	87.5	7.7	0.4	97.2	0.4	0.4	6.9	65.3	28.6	0.0	0
Glycols	103	93.2	12.9	0.0	98.1	1.0	0.0	12.6	68.0	26.2	0.0	0
Other/unknown	98	68.4	23.5	2.0	94.9	1.0	0.0	34.7	33.7	46.9	7.1	1
Total	22,347	82.5	12.5	1.7	96.6	0.7	0.3	15.5	50.2	39.8	3.0	4
Cosmetics/personal care products												
Bath oil/bubble bath	355	97.2	1.1	0.6	98.9	0.0	0.3	3.4	63.9	30.1	0.6	0
Creams, lotions, make-up	787	95.3	2.4	0.8	99.1	0.4	0.1	4.6	80.3	16.0	0.1	0
Dental care products	199	88.4	4.5	2.0	93.0	1.0	1.0	5.5	68.8	21.6	0.0	1
Deodorants	744	95.6	2.6	0.9	98.4	0.8	0.0	5.0	79.3	16.1	0.4	0
Depilatories	6	83.3	16.7	0.0	83.3	16.7	0.0	0.0	33.3	66.7	0.0	0
Douches	33	75.8	18.2	0.0	87.9	0.0	3.0	27.3	63.6	15.2	12.1	0
Eye products	474	93.5	3.6	1.1	97.7	0.0	0.8	3.8	80.2	14.8	0.4	0
Hair care products	2,001	92.7	5.0	0.8	98.0	0.5	0.3	7.8	62.1	29.9	1.9	0
Lipsticks and lip balms	90	96.7	0.0	1.1	98.9	0.0	0.0	1.1	81.1	13.3	0.0	0
Mouthwash	470	92.6	5.3	0.0	95.5	1.5	0.0	8.9	67.2	25.7	0.4	0
Nail polish	518	94.2	2.7	1.0	98.8	0.2	0.0	6.4	59.7	33.6	0.2	0
Nail polish removers	1,105	93.5	3.4	0.5	98.6	0.5	0.1	12.8	65.7	28.3	0.5	0
Nail products, miscellaneous	599	90.8	5.3	2.0	96.7	0.7	0.8	10.4	33.0	17.5	0.4	0
Perfumes/colognes/aftershaves	3,690	97.1	1.2	0.4	98.7	0.4	0.1	6.4	72.9	23.1	0.1	0
Peroxide	133	78.2	18.0	1.5	97.0	0.8	0.8	11.3	40.6	48.1	3.0	0
Soaps (bar, hand, complexion)	1,083	94.7	2.4	0.6	98.5	0.3	0.1	4.1	65.4	30.3	0.4	0
Suntan/sunscreen products	54	90.7	9.3	0.0	100.0	0.0	0.0	3.7	63.0	33.3	1.9	0
Powders	848	94.5	1.9	0.7	97.3	0.4	0.0	10.1	65.1	27.7	0.6	0
Total	13,192	94.5	3.0	0.7	98.1	0.5	0.2	7.1	68.7	25.6	0.6	1
Deodorizers (not for personal use)												
Diaper pail deodorizers	530	97.4	0.4	0.4	98.3	0.2	0.2	6.2	83.6	10.8	0.2	0
Other	767	92.8	2.1	1.4	96.1	0.9	0.1	10.2	75.4	16.9	0.7	0
Total	1,297	94.7	1.4	1.0	97.0	0.6	0.2	8.6	78.7	14.4	0.5	0
Dyes	690	94.9	2.0	0.3	97.4	0.4	0.4	5.7	85.7	8.7	0.9	0
Essential oils	1,202	87.1	7.2	1.5	95.3	0.7	0.2	20.8	55.5	33.3	2.2	0
Fertilizers	1,633	83.3	6.9	2.7	95.3	0.5	0.0	6.6	69.9	19.1	1.3	0

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Table 17, continued

	No. of Exposures	Age (Years)				Reason			Treated in Health Facility (%)	Medical Outcome (Effect)			
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)	None (%)		Minor (%)	Major (%)	Death (No.)	
													91.0
Fire extinguishers	134	45.5	38.1	9.0	91.0	1.5	0.0	32.8	23.9	64.2	3.0	0	
Food products and food poisoning	7,492	46.0	33.6	3.1	72.0	0.8	10.0	10.9	26.4	44.1	3.3	0	
Foreign bodies/toys/miscellaneous													
Bubble blowing solutions	84	98.8	0.0	0.0	98.8	0.0	0.0	1.2	59.5	35.7	0.0	0	
Christmas ornaments	239	95.8	1.7	2.1	99.6	0.0	0.0	4.6	89.5	5.9	0.0	0	
Coins	1,285	89.6	6.2	1.5	97.1	0.2	0.6	8.3	76.7	15.5	1.3	0	
Dessicants	102	83.3	2.0	5.9	92.2	0.0	0.0	0.0	81.4	2.9	0.0	0	
Feces/urine	173	88.4	5.2	1.7	96.0	0.0	0.6	2.9	82.7	9.2	0.0	0	
Glass	127	74.8	18.9	1.6	95.3	0.0	0.0	11.0	67.7	20.5	0.0	0	
Soil	134	91.8	2.2	3.0	97.0	0.7	0.0	4.5	84.3	6.7	0.7	0	
Thermometer	316	73.4	11.7	2.8	87.3	0.3	0.6	3.2	75.6	7.3	0.3	0	
Toys	370	92.4	1.9	1.4	95.4	0.5	0.5	4.6	81.6	10.8	0.3	0	
Other/unknown foreign body	3,269	80.2	9.7	2.2	91.8	0.6	0.5	6.5	77.1	11.0	0.6	0	
Total	6,099	83.9	7.9	2.1	93.6	0.5	0.5	6.3	77.7	11.8	0.7	0	
Fumes/gases/vapors													
Carbon monoxide	935	49.5	37.6	3.7	90.3	0.2	0.6	52.9	5.6	65.9	13.5	4	
Chloramine	183	68.3	28.4	1.1	95.1	1.6	0.0	21.3	7.1	76.5	7.7	0	
Chlorine gas (mixing household products)	144	54.9	40.3	1.4	96.5	2.1	0.0	33.3	2.8	82.6	3.5	0	
Chlorine gas (other)	308	69.0	29.9	2.3	93.2	0.6	0.6	38.3	5.5	70.8	9.1	0	
Hydrogen sulfide	69	53.6	29.0	2.9	85.5	0.0	0.0	46.4	13.0	55.1	14.5	1	
Methane	75	48.0	34.7	1.3	82.7	1.3	1.3	36.0	9.3	65.3	5.3	0	
Nitrous oxide	13	46.2	0.0	7.7	23.1	38.5	0.0	30.8	0.0	38.5	30.8	0	
Propane/simple asphyxiants	33	54.5	33.3	3.0	93.9	0.0	0.0	57.6	15.2	66.7	6.1	0	
Other/unknown	1,138	43.5	38.1	4.4	85.0	0.8	1.1	29.0	19.2	53.4	6.9	0	
Total	2,898	49.9	36.1	3.5	88.5	0.8	0.7	38.4	11.2	62.6	9.3	5	
Fungicides (nonmedicinal)	249	63.9	18.5	4.4	88.8	0.8	0.4	14.1	58.2	20.1	4.8	0	
Heavy metals													
Arsenic	251	64.9	11.2	6.4	82.9	2.0	0.8	32.7	50.2	17.1	8.0	0	
Copper	158	59.5	21.5	2.5	81.0	2.5	1.3	25.9	34.2	32.9	5.1	0	
Lead	276	48.9	23.6	3.3	75.4	0.7	1.8	29.0	41.3	13.4	12.3	0	
Mercury	369	55.6	22.5	3.8	78.9	1.9	0.8	19.2	50.4	19.5	3.5	0	
Metal/polymer fume fever	40	55.0	40.0	0.0	90.0	0.0	0.0	20.0	5.0	75.0	2.5	0	
Selenium	17	70.6	23.5	0.0	94.1	5.9	0.0	29.4	52.9	29.4	11.8	0	
Thallium	4	0.0	25.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	50.0	0	
Zinc	402	57.0	30.8	2.7	89.8	1.0	1.0	23.1	35.1	41.8	5.5	0	
Other/unknown	142	66.2	12.0	4.9	83.8	0.0	0.7	21.8	46.5	25.4	7.0	1	
Total	1,659	57.6	22.5	3.7	82.5	1.4	1.1	24.9	42.1	26.7	6.8	1	

Herbicides	474	51.5	24.1	6.5	85.7	0.0	0.4	19.2	34.6	32.9	7.8	0
2,4-D or 2,4,5-T	68	44.1	30.9	5.9	73.5	7.4	2.9	45.6	23.5	26.5	20.6	1
Diquat/paraquat	512	45.9	29.1	6.8	84.6	0.6	0.6	26.6	34.0	33.6	8.4	0
Other/unknown	1,054	48.3	26.9	6.6	84.3	0.8	0.7	24.5	33.6	32.6	8.9	1
Total												
Hydrocarbons	27	55.6	25.9	3.7	81.5	3.7	0.0	44.4	33.3	25.9	14.8	0
Benzene	182	73.1	19.2	2.2	92.9	3.3	0.5	26.4	31.3	56.0	2.7	0
Diesel fuel	3,025	70.8	24.6	1.9	96.0	1.3	0.2	18.3	30.0	58.0	3.3	0
Gasoline	526	46.2	35.9	3.4	83.1	2.3	0.8	24.5	33.3	41.1	6.7	0
Halogenated hydrocarbons	585	93.6	8.5	2.1	95.0	0.0	0.3	30.1	49.9	35.6	3.9	0
Kerosene	360	87.5	6.9	0.8	95.8	0.8	0.0	21.7	52.2	36.7	2.2	0
Lighter fluid/naphtha	358	89.9	6.4	1.1	98.6	0.0	0.0	9.2	62.3	30.2	0.8	0
Lubricating/motor oils	340	95.0	1.2	0.9	96.2	0.3	0.0	14.4	67.4	22.9	1.2	0
Mineral seal oil	550	82.7	11.5	1.6	95.5	0.2	0.5	17.5	50.0	39.5	2.4	0
Mineral spirits/varsol	971	81.7	11.0	1.9	93.7	1.2	0.4	15.0	53.5	36.3	2.3	0
Toluene/xylene	340	82.1	13.2	1.8	95.9	1.2	0.9	22.4	39.4	46.2	2.6	0
Turpentine	3,830	82.2	10.7	2.0	94.6	0.5	0.4	18.2	53.3	34.0	3.2	2
Other/unknown	11,095	78.0	15.3	1.9	94.6	0.9	0.4	18.9	45.5	41.8	3.1	2
Total												
Insecticides/pesticides (excluding rodenticides)	341	38.3	5.6	5.6	94.4	0.6	1.5	14.4	71.8	18.2	1.2	0
Borates/boric acid	1,085	63.2	18.2	4.7	88.0	0.5	1.2	20.9	45.9	28.8	7.2	1
Carbamates	1,014	63.2	16.0	4.1	82.6	1.4	1.5	24.1	42.1	29.2	7.5	0
Chlorinated hydrocarbon	180	57.8	6.1	5.6	95.6	0.6	0.0	15.6	51.1	17.8	5.0	0
Metaldehyde	2,853	54.3	24.2	5.0	85.8	0.6	1.2	27.2	36.8	33.6	8.1	1
Organophosphate alone	552	64.1	19.6	4.0	89.3	1.6	0.7	19.4	45.8	33.3	4.3	0
Organophosphate + carbamate	73	57.5	24.7	4.1	86.3	0.0	1.4	19.2	43.8	26.0	5.5	0
Organophosphate + chlorinated hydrocarbon	128	71.1	19.5	2.3	89.8	0.0	0.8	21.9	40.6	42.2	7.0	0
Organophosphate + other pesticide	79	69.6	13.9	1.3	86.1	1.3	2.5	13.9	49.4	27.8	2.5	0
Piperonyl butoxide alone	344	70.1	15.4	4.1	89.2	1.5	0.9	24.7	45.6	34.6	7.6	0
Piperonyl butoxide + pyrethrins	426	62.4	20.0	5.4	87.3	0.9	1.6	19.5	43.4	31.5	4.7	0
Pyrethrins alone	292	86.6	8.6	2.1	96.2	0.0	0.0	8.2	55.5	36.0	1.7	0
Insect repellents	1,071	51.7	20.5	4.3	79.4	0.7	1.0	20.0	35.8	28.9	5.0	0
Other/unknown	8,438	60.7	19.3	4.6	86.3	0.8	1.1	22.4	42.4	30.9	6.4	2
Total												
Lacrimators	640	70.9	20.8	2.3	95.5	0.9	0.2	16.9	13.8	75.3	3.3	0
Matches/fireworks/explosives	353	92.4	3.4	0.6	96.6	0.3	0.0	5.1	79.0	11.6	0.8	0
Moth repellents	525	90.5	4.0	1.5	96.8	0.2	0.0	19.0	64.4	25.3	1.7	0
Naphthalene	165	94.5	3.0	0.0	98.2	0.0	0.0	6.1	83.6	12.1	0.0	0
Paradichlorobenzene	86	80.2	5.8	5.8	90.7	0.0	0.0	15.1	59.3	27.9	0.0	0
Other/unknown	776	90.2	4.0	1.7	96.4	0.1	0.0	15.9	67.9	22.8	1.2	0
Total												

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Table 17, continued

	No. of Exposures	Age (Years)			Reason			Treated in Health Facility (%)	Medical Outcome (Effect)			
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)		None (%)	Minor (%)	Major (%)	Death (No.)
Mushrooms	2,231	84.9	7.8	1.8	90.4	4.1	0.8	19.9	46.9	36.8	3.3	0
Paints/varnishes/lacquers	3,024	78.9	13.0	2.4	93.7	1.0	0.4	13.8	58.6	28.6	3.0	0
Photographic products	117	75.2	18.8	1.7	96.6	0.9	0.0	19.7	57.3	25.6	3.4	0
Plants												
Anticholinergic	149	79.2	9.4	4.0	85.2	8.1	0.7	36.9	47.7	30.2	8.1	0
Cardiac glycosides	591	75.5	8.6	4.1	90.9	1.2	0.2	27.1	56.5	19.8	5.2	0
Colchicine	26	88.5	7.7	0.0	100.0	0.0	0.0	11.5	57.7	30.8	0.0	0
Cyanogenic glycosides	608	79.9	7.1	1.5	89.0	0.3	1.0	7.7	68.4	15.6	1.2	0
Depressants	503	88.9	3.0	1.4	91.8	0.8	1.2	13.7	69.0	20.1	1.4	0
Dermatitis	2,108	72.3	15.1	2.1	89.5	0.6	1.1	7.4	49.4	29.3	6.8	0
Gastrointestinal irritants	3,827	81.7	4.7	3.1	90.0	0.6	1.3	6.9	65.6	18.8	1.1	0
Hallucinogenic	142	78.2	8.5	2.8	87.3	4.2	0.0	12.7	65.5	19.0	0.7	0
Nicotine (no tobacco products)	123	73.2	11.4	0.8	78.0	3.3	3.3	17.1	43.9	29.3	0.8	0
Nontoxic plant	6,285	80.6	2.9	2.4	87.1	0.3	1.0	3.1	75.5	7.0	0.5	0
Oxalate	4,761	89.4	1.9	1.8	94.8	0.4	0.2	5.3	66.7	23.6	0.6	0
Solanine	500	83.4	3.4	1.4	89.4	0.2	1.2	13.0	58.6	23.0	1.4	0
Stimulants	181	85.6	4.4	2.8	90.1	1.7	1.7	26.5	58.6	26.5	1.7	0
Toxalbumins	137	75.9	9.5	3.6	90.5	0.0	0.7	27.0	35.0	35.8	8.8	0
Other/unknown	2,385	79.8	8.3	2.8	91.5	0.6	0.6	12.3	60.1	22.2	1.6	0
Total	22,326	81.8	5.2	2.4	90.2	0.6	0.8	7.5	65.8	18.3	1.6	0
Polishes and waxes	96	91.7	5.2	1.0	97.9	0.0	0.0	11.5	74.0	17.7	0.0	0
Radio-isotopes	18	77.8	16.7	5.6	88.9	5.6	0.0	50.0	55.6	38.9	0.0	0
Rodenticides												
Anticoagulants	1,724	76.0	2.1	8.4	93.3	0.5	0.4	15.7	76.9	9.6	0.7	0
Strychnine	69	37.7	18.8	15.9	69.6	10.1	1.4	36.2	33.3	14.5	15.9	0
Other/unknown	310	66.8	7.7	12.6	91.6	0.3	0.0	34.2	53.2	24.5	5.5	0
Total	2,103	73.4	3.5	9.2	92.3	0.8	0.4	19.1	71.9	12.0	1.9	0
Sporting equipment	111	75.8	16.2	2.7	94.6	0.0	0.9	24.3	49.5	31.5	7.2	0
Swimming pool/aquarium products	382	80.9	11.0	2.6	95.8	0.0	0.0	11.8	55.5	30.9	3.9	0
Tobacco products	1,170	95.9	2.1	0.3	97.8	0.9	0.1	13.5	62.5	29.9	0.9	0
Unknown nondrug substances	892	60.0	19.4	4.5	81.7	2.5	1.3	27.9	37.1	29.7	7.1	0

TABLE 18. Demographic Profile of Exposure Cases by Generic Category of Substance: Pharmaceuticals

	No. of Exposures	Age (Years)			Reason		Treated in Health Facility (%)	Medical Outcome (Effect)				
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)		Adverse Reaction (%)	None (%)	Minor (%)	Major (%)	Death (No.)
Analgesics												
Acetaminophen only												
Adult formulation	4,016	70.2	22.9	2.2	87.4	7.2	66.6	32.3	33.0	20.5	5	
Pediatric formulation	5,636	96.9	0.5	0.8	97.2	1.1	17.7	77.7	15.6	0.5	1	
Unknown type	1,527	65.8	15.7	4.5	82.1	4.1	43.5	39.6	24.6	13.5	2	
Acetaminophen formulated with:												
Aspirin	25	68.0	24.0	0.0	84.0	8.0	32.0	40.0	28.0	0.0	0	
Codeine	1,117	63.5	27.1	2.1	76.8	15.3	61.9	16.2	50.8	17.4	1	
Oxycodone	263	60.1	25.1	3.4	70.0	18.6	53.6	14.4	46.8	19.4	1	
Propoxyphene	455	63.3	24.6	4.4	81.3	10.8	70.8	18.2	38.9	25.9	2	
Other narcotic/analog	206	69.4	17.5	1.5	72.8	13.6	40.8	22.3	45.6	9.2	1	
Other drug	1,266	76.1	17.0	2.8	84.4	9.5	53.0	34.9	41.4	11.8	0	
Aspirin only												
Adult formulations	2,556	78.4	15.7	2.0	84.5	11.1	48.4	36.0	36.8	14.0	1	
Pediatric formulations	2,448	97.5	0.6	0.4	97.5	1.0	16.3	67.8	23.5	1.0	0	
Unknown type	751	72.7	15.8	2.8	86.6	5.3	36.6	41.4	30.8	11.5	2	
Aspirin formulated with:												
Codeine	263	68.1	24.3	2.7	75.7	16.3	57.0	17.5	54.8	14.1	0	
Oxycodone	302	63.9	24.2	5.0	72.5	19.2	52.3	18.2	48.3	15.6	1	
Other narcotic/analog	125	57.6	26.4	4.0	66.4	20.0	43.2	24.0	44.8	11.2	1	
Other drug	1,750	80.4	13.3	1.8	84.8	9.8	46.2	38.8	39.8	9.1	1	
Nonaspirin salicylates	65	89.2	6.2	0.0	89.2	4.6	16.9	61.5	27.7	1.5	0	
Codeine	324	84.0	10.5	0.3	83.6	9.3	29.3	33.6	47.8	5.9	0	
Methadone/heroin/morphine	38	55.3	28.9	13.2	36.8	55.3	81.6	13.2	34.2	31.6	0	
Nonsteroidal												
Anti-inflammatory drugs												
Pentazocine	1,705	68.4	14.7	2.9	75.6	9.7	37.8	37.9	34.5	6.9	1	
Propoxyphene	61	49.2	29.5	3.3	60.7	21.3	59.0	9.8	49.2	16.4	0	
Phenazopyridine	218	58.3	24.8	4.6	66.1	19.3	55.0	11.9	44.5	22.5	0	
Salicylamide	104	86.5	5.8	1.0	91.3	1.0	36.5	40.4	45.2	3.8	0	
Other/unknown	23	82.6	8.7	4.3	91.3	8.7	34.8	39.1	47.8	13.0	0	
Total	527	66.4	19.5	3.0	67.2	19.2	40.6	24.1	40.8	15.0	2	
Total	25,771	79.4	12.9	2.0	86.6	7.2	40.9	45.8	31.2	10.1	22	
Anesthetics												
730	730	84.1	7.8	1.4	89.0	5.1	14.8	61.8	24.9	2.2	0	
Anticholinergic agents												
1,686	1,686	75.6	14.6	2.0	80.9	10.4	40.3	35.8	40.9	8.1	0	
Anticoagulants												
325	325	72.0	3.4	11.4	90.5	0.9	21.5	64.3	17.5	4.0	0	
Anticonvulsants												
616	616	71.4	18.2	2.3	80.5	10.9	60.9	26.3	34.6	23.7	0	
313	313	74.8	15.3	2.9	80.8	9.9	52.7	28.1	40.6	16.0	0	
929	929	72.6	17.2	2.5	80.6	10.5	58.1	26.9	36.6	21.1	0	

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Table 18, continued

	No. of Exposures	Age (Years)			Reason			Treated in Health Facility (%)	Medical Outcome (Effect)			
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)		None (%)	Minor (%)	Major (%)	Death (No.)
Antidepressants												
Cyclic antidepressants												
Amitriptyline	715	69.4	18.5	3.9	76.8	14.1	0.3	71.6	9.4	35.1	37.6	5
Amoxapine	100	66.0	19.0	0.0	84.0	3.0	2.0	61.0	10.1	30.0	34.0	3
Desipramine	69	72.5	17.4	2.9	79.7	13.0	0.0	75.4	10.1	33.3	40.6	2
Doxepin	380	62.6	25.5	3.2	79.5	12.4	0.5	70.8	12.4	30.5	36.6	2
Imipramine	342	77.2	12.9	2.9	82.5	10.5	0.3	67.3	22.2	32.2	27.5	2
Maprotiline	127	54.3	20.5	6.3	74.0	8.7	2.4	60.6	12.6	31.5	33.1	0
Nortriptyline	57	84.2	5.3	1.8	84.2	5.3	0.0	75.4	12.3	33.3	33.3	1
Protriptyline	9	88.9	11.1	0.0	88.9	11.1	0.0	77.8	11.1	55.6	33.3	0
Formulated with a benzodiazepine	137	62.8	28.5	2.9	82.5	10.9	0.7	71.5	14.6	36.5	32.1	1
Formulated with a phenothiazine	217	68.2	18.9	2.8	72.8	16.6	1.8	72.8	12.4	43.8	26.3	0
Other/unknown	110	60.9	22.7	4.5	76.4	10.9	2.7	67.3	13.6	36.4	29.1	0
Lithium	249	66.3	19.3	5.2	75.1	14.5	0.4	68.3	18.1	36.5	25.7	0
MAO inhibitor	125	51.2	30.4	6.4	60.8	17.6	5.6	62.4	12.0	34.4	24.0	3
Trazodone	206	62.1	23.3	2.4	71.4	18.0	0.0	64.1	14.1	44.2	22.8	0
Other/unknown	17	29.4	41.2	17.6	94.1	0.0	0.0	64.7	17.6	23.5	29.4	0
Total	2,860	66.5	20.3	3.7	77.0	12.9	0.9	69.0	13.7	35.2	31.7	19
Antihistamines	1,787	78.4	12.4	2.2	82.6	9.2	0.7	40.6	35.5	40.3	10.3	0
Antimicrobials												
Antibiotics	4,024	82.7	8.3	1.3	85.2	6.2	1.0	13.2	61.7	24.6	1.5	1
Antifungals	186	91.4	3.8	1.1	94.6	3.2	0.0	12.9	69.4	21.0	1.1	0
Anthelmintics	284	82.4	9.9	1.4	94.4	1.1	0.4	13.0	73.2	15.8	2.1	0
Antiparasitics	599	73.1	15.0	1.0	74.5	12.5	1.5	22.9	48.7	29.2	5.0	0
Antituberculars												
Isoniazid	52	63.5	17.3	5.8	80.8	7.7	3.8	61.5	34.6	17.3	34.6	1
Other/unknown	11	81.8	0.0	0.0	90.9	0.0	0.0	45.5	27.3	36.4	18.2	0
Antivirals	404	82.4	7.4	2.5	87.6	4.5	0.5	16.3	64.4	21.0	1.7	0
Other/unknown	33	81.8	15.2	0.0	81.8	12.1	0.0	21.2	57.6	27.3	6.1	0
Total	5,593	81.8	9.0	1.4	84.9	6.4	1.0	15.0	61.0	24.3	2.3	2
Antineoplastics	39	76.9	12.8	5.1	92.3	2.6	0.0	61.5	43.6	28.2	10.3	0
Asthma therapies												
Aminophylline/theophylline	1,026	78.4	12.9	2.2	81.6	9.9	1.1	50.3	30.4	39.7	15.5	4
Other/unknown	318	56.3	6.0	1.3	56.6	6.6	1.6	25.5	28.9	28.6	3.5	0
Total	1,344	73.1	11.2	2.0	75.7	9.2	1.2	44.4	30.1	37.1	12.6	4
Cardiovascular drugs												
Antiarrhythmics	158	72.2	10.1	3.2	77.2	10.8	0.0	43.7	36.7	28.5	14.6	1
Antihypertensives	306	81.7	7.2	2.6	90.5	2.0	0.0	58.5	34.0	35.3	16.3	1

Beta-blockers	725	76.4	13.7	2.1	86.8	5.2	0.6	46.2	44.6	28.8	11.6	0
Calcium antagonists	96	79.2	12.5	0.0	82.3	8.3	1.0	36.5	50.0	31.3	6.3	0
Cardiac glycosides	300	83.7	11.3	2.7	92.3	3.0	0.7	45.7	49.3	26.0	11.7	3
Vasodilators	592	80.9	9.5	1.7	88.3	4.2	0.3	29.6	56.3	26.7	3.2	0
Other/unknown	110	79.1	9.1	4.5	84.5	6.4	0.0	39.1	42.7	30.9	7.3	0
Total	2,287	79.2	10.9	2.2	87.5	4.8	0.4	42.5	46.4	28.9	9.8	5
Cold and cough preparations												
Acetaminophen + decongestant/ antihistamine ± dextromethorphan	338	75.7	12.4	1.8	84.9	5.6	0.3	38.5	33.1	41.1	7.4	0
Aspirin and acetaminophen + decongestant/antihistamine ± dextromethorphan	10	100.0	0.0	0.0	100.0	0.0	0.0	30.0	20.0	60.0	10.0	0
Aspirin + decongestant/ antihistamine ± dextromethorphan	282	79.8	9.2	3.2	81.9	9.9	0.4	41.5	35.1	45.4	6.7	0
Expectorants/antitussives	997	93.8	3.8	0.2	93.8	3.6	0.3	21.1	53.0	39.3	0.7	0
Other formulations for cough/colds	8,124	91.0	4.6	0.6	91.7	4.0	0.3	23.4	46.3	42.5	2.1	1
Total	9,751	90.5	4.9	0.7	91.4	4.2	0.3	24.2	46.2	42.2	2.3	1
Diagnostic agents	26	65.4	15.4	3.8	84.6	7.7	3.8	26.9	65.4	11.5	7.7	0
Diuretics	914	81.5	8.4	2.3	87.1	5.3	0.8	31.7	45.4	36.0	4.8	0
Electrolytes/minerals												
Calcium salts	1,671	93.4	2.2	1.0	95.8	1.1	0.3	3.8	81.6	11.4	0.3	0
Fluoride (excluding vitamins)	1,117	95.7	1.3	0.3	96.4	0.8	0.0	4.9	50.9	41.8	0.4	0
Iron (excluding vitamins)	937	93.3	2.9	1.2	95.4	2.0	0.1	36.9	44.1	39.2	7.8	3
Magnesium salts	81	79.0	7.4	1.2	88.9	0.0	0.0	13.6	46.9	30.9	3.7	0
Potassium salts	143	78.3	12.6	2.1	88.1	5.6	0.0	25.2	58.7	21.7	4.2	0
Sodium salts	581	84.3	9.1	1.4	93.5	1.4	0.7	12.7	61.4	27.9	0.9	0
Zinc	402	57.0	30.8	2.7	89.8	1.0	1.0	23.1	35.1	41.8	5.5	0
Other/unknown	65	81.5	7.7	1.5	86.2	4.6	1.5	20.0	53.8	29.2	3.1	0
Total	4,997	89.1	5.7	1.1	94.7	1.4	0.3	13.8	60.1	28.6	2.4	3
Eye/ear/nose/throat preparations	2,475	88.3	7.4	1.1	94.7	1.7	0.4	17.1	61.6	28.3	1.6	0
Gastrointestinal preparations												
Antacids	2,235	92.4	2.8	1.1	94.9	1.7	0.3	7.2	77.6	14.0	1.2	0
Antidiarrheals/antispasmodics	535	79.8	10.5	2.2	87.1	6.2	1.1	46.7	42.1	35.9	9.3	0
Laxatives	115	87.8	7.0	0.9	85.2	10.4	0.9	20.0	40.9	48.7	2.6	0
Other/unknown	3,829	91.6	3.6	1.1	94.9	2.1	0.3	8.3	59.7	31.9	1.5	0
Total	6,714	90.9	3.9	1.2	94.1	2.4	0.4	11.2	63.9	26.5	2.1	0
Hormones and hormone antagonists												
Corticosteroids	858	86.8	7.5	1.5	93.0	3.0	0.7	6.4	77.4	13.6	0.8	0
Insulin	57	66.7	17.5	5.3	78.9	10.5	0.0	43.9	22.8	33.3	26.3	0

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Table 18, continued

	No. of Exposures	Age (Years)			Reason			Treated in Health Facility (%)				Medical Outcome (Effect)		
		<6 (%)	6-17 (%)	>17 (%)	Accidental (%)	Intentional (%)	Adverse Reaction (%)	Facility (%)	None (%)	Minor (%)	Major (%)	Death (No.)		
Oral contraceptives	1,442	93.9	2.1	1.5	97.3	1.2	0.3	6.8	83.6	11.6	0.1	0		
Oral hypoglycemics	121	79.3	9.9	0.8	84.3	7.4	0.0	49.6	37.2	32.2	17.4	0		
Thyroid preparations	616	90.3	3.7	1.8	93.5	2.9	0.3	31.5	61.7	23.2	4.5	0		
Other/unknown	355	85.9	7.3	1.1	89.0	5.6	0.3	18.0	67.3	21.4	1.7	0		
Total	3,449	89.7	4.8	1.5	93.9	2.8	0.4	14.4	73.8	16.3	2.3	0		
Miscellaneous drugs														
Allopurinol	48	85.4	6.3	2.1	87.5	4.2	0.0	18.8	62.5	24.0	0.0	0		
L-dopa and related drugs	35	88.6	8.6	0.0	82.9	8.6	0.0	37.1	42.9	34.3	5.7	0		
Disulfiram	199	44.7	33.2	5.5	49.7	33.7	1.5	55.8	13.1	44.2	17.6	0		
Ergot alkaloids	120	79.2	6.7	2.5	75.0	10.8	0.8	40.0	34.2	44.2	4.2	0		
Homeopathic/herbal preparations	42	83.3	2.4	0.0	85.7	0.0	2.4	9.5	52.4	28.6	2.4	0		
Other	615	68.0	13.5	2.4	72.7	11.2	0.8	22.9	36.9	37.1	3.4	0		
Total	1,023	74.2	15.1	2.8	71.0	14.2	0.9	30.4	34.4	38.4	6.0	0		
Muscle relaxants	1,333	65.8	23.5	3.8	76.9	15.0	0.8	66.7	16.5	49.7	18.5	0		
Sedative/hypnotics/antipsychotics														
Barbiturates														
Long-acting	920	73.2	17.6	1.5	80.2	11.1	0.7	57.2	21.3	40.5	23.8	0		
Short/intermediate acting	283	61.8	19.8	4.2	59.4	23.7	2.5	60.8	13.4	37.1	23.7	2		
Unknown type	7	57.1	14.3	0.0	85.7	0.0	14.3	71.4	0.0	28.6	57.1	1		
Benzodiazepines	4,082	66.1	22.5	4.0	73.4	17.9	0.8	59.2	14.9	53.3	17.0	3		
Chloral hydrate	111	66.7	19.8	4.5	66.7	21.6	0.9	58.6	12.6	38.7	27.0	0		
Ethchlorvynol	117	65.0	24.8	3.4	67.5	22.2	0.9	71.8	7.7	40.2	35.9	0		
Glutethimide	47	80.9	10.6	4.3	76.6	17.0	2.1	83.0	6.4	34.0	42.6	0		
Meprobamate	136	61.0	20.6	4.4	69.1	14.7	1.5	63.2	8.1	41.9	28.7	0		
Methaqualone	127	58.3	22.0	10.2	59.8	30.7	0.0	64.6	11.8	42.5	24.4	0		
OTC sleep aids	1,008	65.9	23.8	4.3	78.4	14.3	0.8	70.9	15.6	49.7	20.6	0		
Phenothiazines	1,544	71.3	18.1	3.1	75.6	14.6	1.5	61.3	19.4	45.2	19.3	5		
Other/unknown	105	55.2	31.4	6.7	74.3	17.1	1.0	58.1	10.5	51.4	20.0	0		
Total	8,487	67.4	21.2	3.7	74.3	16.6	1.0	61.2	16.0	48.6	19.7	11		
Stimulants and street drugs														
Amphetamines	859	71.4	13.7	2.6	59.0	28.5	0.7	50.6	18.7	44.8	14.8	1		
Amyl/butyl nitrites	29	48.3	37.9	6.9	44.8	44.8	0.0	44.8	10.3	62.1	10.3	0		
Caffeine	468	72.0	16.5	2.4	73.7	15.6	1.3	36.3	22.2	53.4	7.1	0		
Cocaine	281	45.9	29.9	8.2	17.1	66.2	2.1	59.1	4.3	44.5	20.3	4		
Diet aids														
Phenylpropanolamine (PPA)	136	76.5	16.2	2.2	81.6	12.5	0.0	42.6	30.1	43.4	5.9	0		
PPA + caffeine	742	83.3	10.4	2.6	79.8	15.8	0.4	51.3	26.5	50.8	10.2	0		

LSD	132	56.1	23.5	6.1	28.0	57.6	0.8	60.6	6.1	56.1	16.7	0
Marijuana	203	52.2	21.7	3.9	33.0	40.4	2.5	37.4	7.4	50.2	8.4	1
Mescaline/peyote	33	66.7	15.2	3.0	45.5	39.4	0.0	54.5	9.1	54.5	15.2	0
Phencyclidine	135	60.0	23.7	5.9	25.9	60.7	0.0	74.1	3.0	52.6	27.4	0
PPA-containing "look-alikes"	70	45.7	22.9	2.9	52.9	21.4	1.4	50.0	17.1	32.9	14.3	1
Other/unknown	472	70.1	18.9	4.7	57.6	32.6	0.8	53.0	17.8	48.3	15.7	2
Total	3,560	69.1	17.0	3.6	58.4	30.1	0.9	50.1	18.1	48.6	13.2	9
Topicals												
Acne preparations	91	86.8	9.9	0.0	92.3	4.4	1.1	15.4	58.2	33.0	3.3	0
Boric acid antiseptics	348	81.3	10.6	3.7	96.0	0.3	0.3	12.1	64.4	24.7	1.7	0
Camphor	723	91.0	4.0	1.1	94.9	2.1	0.8	44.0	64.5	24.3	2.6	0
Camphor + methyl salicylate	1,174	92.2	5.1	0.4	97.5	0.9	0.2	12.8	67.1	26.1	0.7	0
Diaper care products	1,443	95.1	0.5	0.8	98.4	0.0	0.1	1.5	85.4	10.2	0.1	0
Hexachlorophene antiseptics	60	78.3	16.7	3.3	95.0	3.3	0.0	35.0	55.0	33.3	5.0	0
Hydrogen peroxide	1,597	82.9	13.5	1.2	96.9	0.9	0.3	6.4	62.0	31.6	0.7	0
Iodine antiseptics	265	77.0	14.3	1.9	88.7	3.8	0.0	23.4	57.4	30.6	2.3	0
Mercurial antiseptics	255	90.6	4.3	1.6	97.6	0.4	0.4	12.9	76.1	16.5	1.6	0
Methyl salicylate	366	90.7	5.5	1.6	95.4	1.1	0.3	17.2	59.8	26.8	2.5	1
Podophyllin	18	44.4	44.4	5.6	88.9	5.6	0.0	55.6	27.8	38.9	22.2	0
Salicylic acid	178	91.6	2.2	1.1	96.1	1.1	0.0	13.5	65.2	25.8	0.6	0
Other/unknown	1,042	90.1	5.3	1.2	95.3	1.5	0.4	16.8	66.4	25.5	0.7	0
Total	7,560	88.9	6.7	1.2	96.4	1.1	0.3	13.7	68.3	23.9	1.1	1
Veterinary drug (no human equivalent)	265	76.2	15.1	3.0	93.2	2.3	0.4	17.7	62.3	21.9	3.4	0
Vitamins												
Multiple vitamins—adult preparations												
No iron, no fluoride	235	91.5	6.4	0.4	95.7	2.6	0.0	9.4	67.2	28.1	0.9	0
With iron, no fluoride	661	92.7	3.5	0.3	94.7	2.7	0.2	23.4	62.0	28.3	1.5	0
With iron, with fluoride	24	91.7	8.3	0.0	87.5	8.3	0.0	25.0	50.0	41.7	0.0	0
No iron, with fluoride	44	93.2	2.3	0.0	88.6	9.1	0.0	0.0	75.0	22.7	0.0	0
Multiple vitamins—pediatric preparations												
No iron, no fluoride	1,677	97.0	1.9	0.2	98.4	0.9	0.0	4.7	69.1	26.0	0.3	0
With iron, no fluoride	2,533	95.5	2.5	0.3	97.3	1.3	0.0	18.9	61.7	30.8	0.8	0
With iron, with fluoride	174	97.7	0.6	0.0	94.8	1.7	0.0	14.9	60.3	31.6	1.1	0
No iron, with fluoride	398	96.5	1.3	0.0	98.5	0.5	0.0	2.0	65.8	27.6	0.3	0
Vitamin A	287	86.1	7.7	1.0	91.6	4.2	0.0	11.1	66.9	23.0	0.0	0
Niacin	83	66.2	28.9	2.4	54.2	41.0	2.4	8.4	14.5	79.5	0.0	0
Pyridoxine	24	79.2	12.5	0.0	79.2	12.5	0.0	8.3	66.7	16.7	0.0	0
Other B complex vitamins	56	91.1	3.6	0.0	94.6	3.6	0.0	5.4	75.0	21.4	0.0	0
Vitamin C	401	90.8	6.5	0.2	94.5	2.0	0.2	4.2	60.3	31.2	0.5	0
Vitamin D	51	94.1	3.9	2.0	94.1	3.9	0.0	9.8	72.5	17.6	5.9	0
Vitamin E	108	93.5	2.8	0.9	94.4	1.9	0.0	2.8	71.3	20.4	0.9	0
Other/unknown	1,009	89.3	5.1	1.4	91.8	4.4	0.1	15.9	61.4	26.9	1.1	0
Total	7,765	93.7	3.6	0.5	95.5	2.4	0.1	12.9	63.6	28.6	0.9	0
Unknown drug	1,627	65.6	15.2	3.2	72.2	11.1	0.7	40.0	30.2	32.3	10.0	1