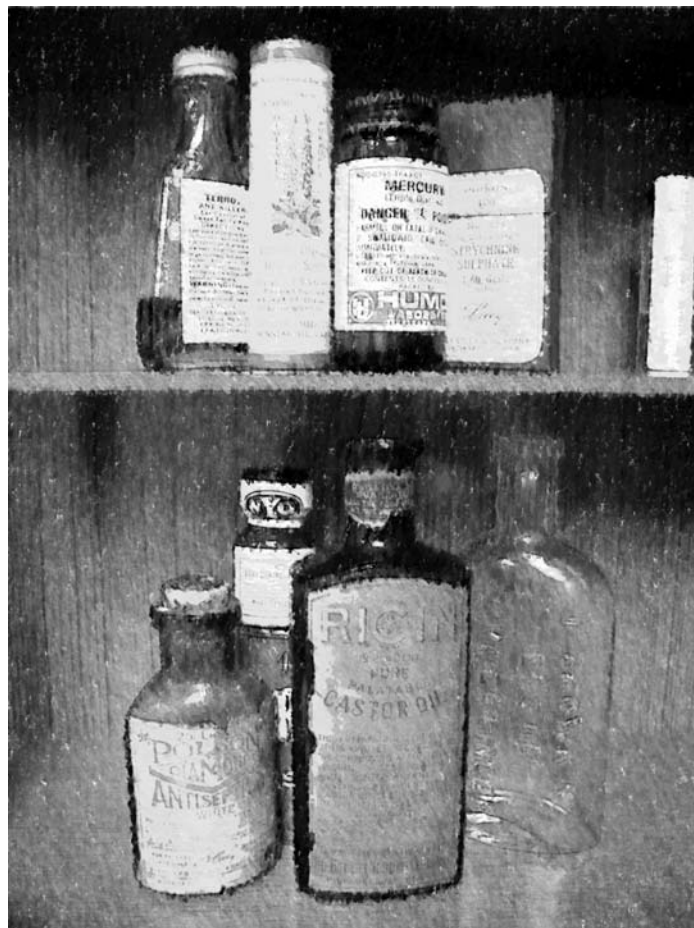


# INDIANA **POISON** CENTER

## 2005 Annual Statistical Summary

Designated as the Regional Poison Information Center for Indiana by the Indiana State Department of Health and Certified by the American Association of Poison Control Centers



Indiana State  
Department of Health

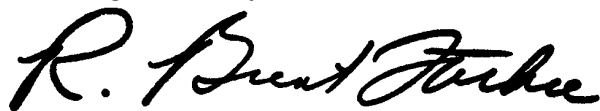
*A state-wide community health initiative of  
the Indiana State Department of Health and  
Clarian Health Partners, Inc.*



Clarian Health  
Methodist • IU • Riley

*During 2005, the Indiana Poison Center received almost 83,000 calls for help. We responded to a 1.0% increase in human exposures compared to 2004 and over 19,000 information calls. Children remain our most commonly exposed age group, although usually with benign effects. Intentional poisonings continue to contribute a continued more severe case mix. We are very pleased that our contacts in the health care community remain strong. Your input is always welcome to help develop our program to better serve the needs of health care providers throughout the state. Examples of this are continuation of the state's only inpatient medical toxicology consult service at our four Indianapolis hospitals to help manage the care of poisoned patients and of our Medical Toxicology Fellowship program to train physicians in medical toxicology. The ACGME accredited Medical Toxicology Fellowship is one of only 14 in the US. Response to these services remains brisk. Reports of animal poisoning increased this year by 4% to 3,661 cases.*

*The strength of our personnel continues to be the backbone of the Center. Nationally, many poison centers remain in shaky financial condition as host institutions and government agencies attempt to reduce medical care costs. The Indiana Poison Center is not immune to this. Due to circumstances beyond our control, funds for toxicosurveillance activities are no longer available to support our operations. As a consequence, our Member Hospital Network will increase its yearly membership fees and charges to non-member hospitals for consultations they initiate in 2006, as the program was no longer providing sufficient funds to cover our expenses. Calls from non-member hospitals continue to be depressed, which is concerning. Poison centers, such as the Indiana Poison Center, have been at the forefront of managed care and medical care cost containment since their inception and their cost effectiveness is well documented.<sup>1,2,3</sup> The CDC and HRSA Final Report of the Poison Control Center Advisory Work Group urged Federal ongoing "fair share" support of poison centers including interim support of poison centers until permanent funding can be found and recommended six projects to improve poison center function, including a national toll-free number.<sup>3</sup> This toll free number was activated in Indiana early in 2004 and a steady increase in calls through this line has been seen. We are now in the 4<sup>th</sup> full year of federal funding from the "**The Poison Control Center Enhancement and Awareness Act**" and "**The Poison Control Center Enhancement and Awareness Act Amendments of 2004**". These funds were first used to update the technology capabilities of the center, and are now supporting staff salaries and greatly enhancing public education and awareness activities. Funding is available through FY 2009 from these acts. In 2005, the Institute of Medicine published "**Forging a Poison Prevention and Control System**", a comprehensive, indepth analysis of poison centers in the United States. They made 12 specific recommendations including increasing collaboration and integration with public health agencies, developing an all-hazards emergency preparedness infrastructure, increasing funding by the Federal Government 5-fold to \$100 million/year for core activities, enhancing toxicosurveillance and research on poisoning epidemiology, treatment, prevention, access, delivery and cost-effectiveness.<sup>4</sup> Development of stable, adequate, ongoing, and dedicated sources of funding for the Indiana Poison Center still remains crucial for it's survival in this era of medical care cost cutting. Toward that end, we continue to attempt to develop stable state sources for primary funding of this critical public health service. We look forward to the coming year as an opportunity for our services to you to further evolve, in order to meet the toxicologic needs of Indiana.*



R. Brent Furbee, M.D., FACEP, ABMT  
Medical Director  
Indiana Poison Center



James B. Mowry, Pharm.D., DABAT, FAACT  
Program Director  
Indiana Poison Center

1. Harrison DL et al. Cost-effectiveness of regional poison control centers. Arch Intern Med 1996; 156:2601.
2. Miller TR. Cost of poisoning in the United States and savings from poison control centers: a benefit cost analysis. Ann Emerg Med 1998; 29:239.
3. The Poison Control Center Advisory Work Group. Final Report. Centers for Disease Control and Health Resources and Services Administration, December 1996.
4. Committee on Poison Prevention and Control. Forging a Poison Prevention and Control System. Insitute of Medicine – National Academies of Science, 2005. (<http://books.nap.edu/catalog/10971.html>)

## INTRODUCTION

The Indiana Poison Center (IPC) was established to provide toll-free access to emergency poison exposure information for all Hoosiers. In its twenty-third year of operation, the center is a round-the-clock information and treatment resource for all citizens of Indiana.

The IPC is a collaborative effort of the Indiana State Department of Health, Clarian Health Partners, Federal Maternal and Child Health Bureau and health care providers throughout the state. It is designated as the official poison information center for the state by the Indiana State Department of Health and is certified as a regional poison information center by the American Association of Poison Control Centers, one of only 54 in the nation and the only one in Indiana.

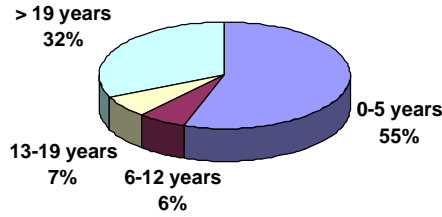
In 2005, the IPC received 82,844 requests for assistance (averaging 227 calls per day). Of these calls, 63,025 concerned exposures to poisons and 19,819 were callers seeking information without an exposure. The 63,025 poison exposure calls resulted from 59,363 human and 3,662 animal poisoning cases. The 59,363 human poison exposure cases managed represent a 1.1% increase over 2004. In addition, the staff of the Poison Center placed 75,085 calls to patients and health care professionals for follow-up (averaging 206 calls per day).

This report presents an overview of IPC poisoning data and other activities for 2005. Additional information is available upon request. Data was available to evaluate 59,197 confirmed human cases.

## AGE

Poisonings remain a major health hazard among young children. Children under six years of age account for the majority (55%) of the poisonings managed by the IPC during

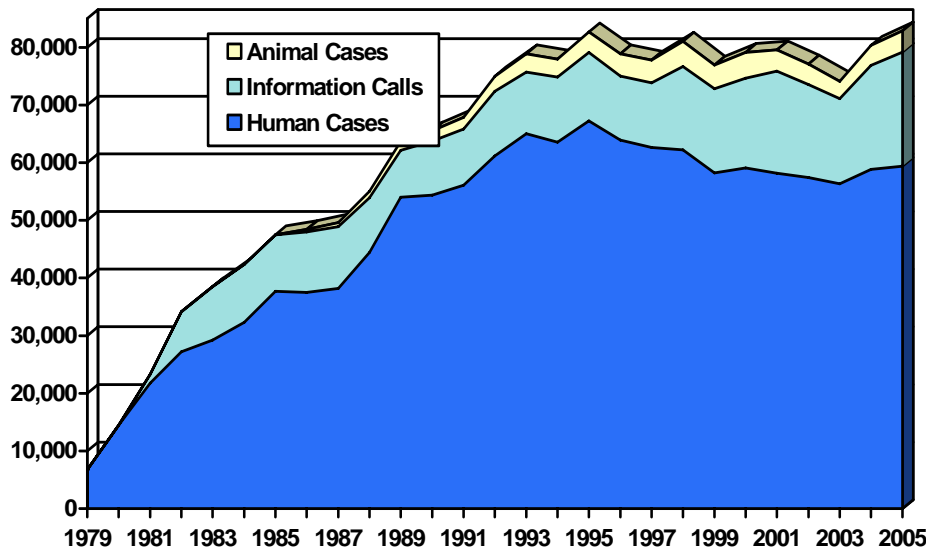
2005, approximately the same as in 2004. Although the incidence of poisoning is still greater in children, most severe poisonings and poisoning deaths occur in adolescents and adults (39% of cases) due to their exposures being intentional in nature. The trend for increasing age as compared to historical averages was once again seen this year.



Age (Years)	Number		Total	%
	Males	Females		
<1	1,616	1,441	3,069	5.2%
1	5,314	4,698	10,019	16.9%
2	5,764	5,418	11,193	18.9%
3	2,554	2,135	4,693	7.9%
4	1,256	990	2,250	3.8%
5	702	501	1,207	2.0%
6 - 12	2,099	1,542	3,648	6.2%
13 - 19	1,911	2,189	4,104	6.9%
20 - 29	2,227	2,601	4,829	8.2%
30 - 39	1,719	2,305	4,028	6.8%
40 - 49	1,407	1,964	3,372	5.7%
50 - 59	865	1,331	2,196	3.7%
60 - 69	430	742	1,040	2.0%
70 - 99	455	957	1,412	2.4%
Unk Adult	688	967	1,714	2.9%
Unk Infant	9	14	25	0.0%
Unk Child	65	48	133	0.2%
Unknown	46	52	133	0.2%
<b>Total</b>	<b>28,630</b>	<b>29,846</b>	<b>58,687</b>	<b>100%</b>

## GENDER

Examination of calls where the gender was documented shows an almost even split between males and females. Males predominate slightly in childhood (53%), while females predominate in both the adolescent and adult ages (61%).



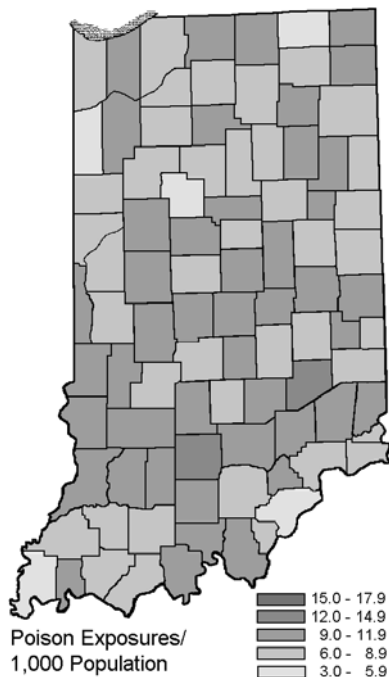
## GEOGRAPHIC DISTRIBUTION

Overall, 98.8% of exposure calls originated in Indiana. In addition, the IPC received calls from 42 other states and foreign countries, with Kentucky, Illinois, Michigan, and Ohio accounting for 75% of these out-of-state calls. One out of every 77 Hoosiers utilized the Indiana Poison Center's services in 2005.

## CALLER

In 2005, 64,516 calls (78%) were received from the general public. Calls were also received from 17,410 health caregivers (physicians, nurses, EMT's, paramedics, and pharmacists), with 8,484 of these coming from hospitals throughout the state. Daily contacts were made consisting of IPC referral of patients to emergency departments for treatment or hospital initiated requests for information and/or consultation on cases managed either in-house or by telephone.

City	Hospital	Patients Request Referred or to ED Consult	
		to ED	Consult
Anderson	Community	44	73
	St. John's Health	45	110
Angola	Cameron Memorial	21	72
Auburn	DeKalb Memorial	32	48
Avon	Clarian West	15	58
Batesville	Margaret Mary	20	29
Bedford	Bedford Regional	26	46
Bedford	Dunn Memorial	16	56
Beech Grove	St. Francis Center	62	157
Bloomington	Bloomington	106	161
Bluffton	Bluffton Regional	25	45
Booneville	St. Mary's Warrick	9	6
Brazil	St. Vincent Clay	18	50
Bremen	Community Hospital	8	5
Carmel	Clarian North	1	2
	St. Vincent Carmel	40	72
Charlestown	Saint Catherine	2	2
Clinton	West Central	20	8
Columbia City	Parkview Whitley	16	16
Columbus	Columbus Regional	76	122
Connersville	Fayette Memorial	22	38
Corydon	Harrison County	21	6
Crawfordsville	St. Clare	22	36
Crown Point	St. Anthony	38	159
Danville	Hendricks Regional	55	89
Decatur	Adams Memorial	15	20
Dyer	St. Margaret Mercy	13	133
East Chicago	St. Catherine	11	3
Elkhart	Elkhart General	95	228
Elwood	St. Vincent Mercy	7	26
Evansville	Deaconess	91	178
	Evansville State	0	4
	St. Mary's	82	36
	St. Mary's (Welborn)	0	2
Fort Wayne	Dupont	36	16
	Ft. Wayne State	1	5
	Lutheran	62	40
	Parkview Memorial	124	190
	Parkview North	13	25
	St. Joseph's	23	15
	Veterans Admin	1	0
Frankfort	St. Vincent Frankfort	22	80
Franklin	Johnson Memorial	23	26

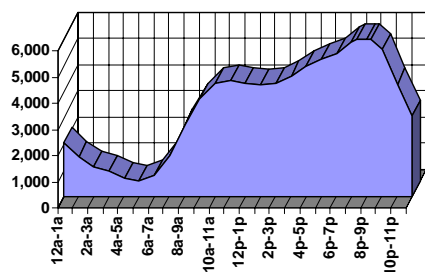


City	Hospital	Patients Referred to ED	Request or Consult
Gary	Methodist (Northlake)	25	102
Goshen	Goshen General	54	100
Greencastle	Putnam County	26	31
Greenfield	Hancock County	29	53
Greensburg	Decatur County	19	52
Hammond	St. Margaret Mercy	22	211
Hartford City	Blackford County	14	15
Hobart	St. Mary	26	65
Huntingburg	St. Joseph's	5	4
Huntington	Parkview Huntington	27	43
Indianapolis	Community East	57	109
	Community North	106	201
	Community South	52	176
	Fairbanks	0	1
	Indiana University	106	96
	Methodist	250	563
	St. Francis South	91	95
	St. Vincent Hospital	149	203
	St. Vincent Women's	1	0
	Veterans Admin	5	29
	Westview	4	3
	Wishard Memorial	129	337
Jasper	Memorial	34	55
Jeffersonville	Clark County	33	9
Kendallville	Parkview Noble	20	55
Knox	Starke Memorial	15	33
	Howard Community	34	48
Kokomo	St. Joseph Memorial	26	13
	Lafayette Home	93	237
Lafayette	St. Elizabeth	38	63
	Parkview LaGrange	14	21
LaGrange	Parkview LaGrange	14	21
LaPorte	LaPorte	35	93
Lawrenceburg	Dearborn County	35	116
Lebanon	Witham	32	56
Linton	Greene County	17	56
Logansport	Memorial	23	101
Madison	King's Daughters'	30	13
Madison	Madison State	0	1
Marion	Marion General	52	76
	Veterans Admin	2	2
Martinsville	Morgan County	31	57
Merrillville	Methodist (Southlake)	22	116

City	Hospital	Patients Referred to ED	Request or Consult
Michigan City	St. Anthony	36	123
Mishawaka	St. Joseph	32	68
Monticello	White County	10	26
Mooreville	St. Francis	1	2
Muncie	Ball Memorial	95	98
Munster	Community	37	120
New Albany	Floyd Memorial	40	3
New Castle	Henry Memorial	22	81
Noblesville	Riverview Hospital	61	88
North Vernon	St. Vincent Jennings	12	19
Paoli	Bloomington Orange Co.	19	54
Peru	Dukes Memorial	20	7
Plymouth	St. Joseph's Marshall Co.	23	55
Portage	Portage Community	28	129
Portland	Jay County	15	26
Princeton	Gibson General	19	45
Rensselaer	Jasper County	17	74
Richmond	Reid	53	135
Rochester	Woodlawn	14	35
Rushville	Rush Memorial	10	20
Salem	Washington County	2	4
Scottsburg	Scott County	16	5
Seymour	Schneck Med Cntr	31	120
Shelbyville	Major	23	70
South Bend	Memorial	84	240
	St. Joseph Regional	66	175
Sullivan	Sullivan County	19	50
Tell City	Perry County	13	41
Terre Haute	Terre Haute Regional	45	71
	Union	45	16
Tipton	Tipton County	7	17
Valparaiso	Porter Memorial	98	180
Vincennes	Good Samaritan	42	101
Wabash	Wabash County	13	34
Warsaw	Kosciusko	25	8
	Community		
Washington	Daviess Community	26	51
West Lafayette	Purdue University	0	3
Williamsport	St. Vincent Williamsport	13	16
Winamac	Pulaski Memorial	4	34
Winchester	St. Vincent Randolph	6	16

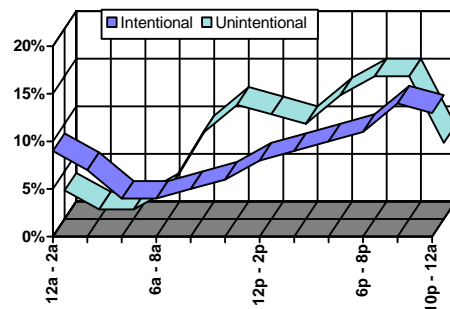
### TIME OF CALLS

The total call volume to IPC shows an initial peak between 10 am and noon with a larger peak occurring between 7 pm and 8 pm.



This is primarily accounted for by the distribution of accidental poisonings peaking around mealtimes. Intentional poisonings, on the other hand, show a higher incidence than unintentional poisonings from midnight to 6 am and then steadily increase throughout the

day, finally peaking at between 8 pm and 10 pm.



### CIRCUMSTANCE

Acute exposures account for 96.9% of the total calls, while 1.4% are chronic in nature. Occupational exposure calls have remained essentially constant from 1989 through 2005, while therapeutic errors and misuse have increased substantially. Malicious cases have remained at our background incidence after the anthrax scares of 2001. The specific reasons for exposures are:

Reason	Number	Percent
<b>Unintentional</b>		
General	32,506	54.9%
Environmental	1,083	1.8%
Occupational	920	1.6%
Therapeutic error	5,409	9.1%
Misuse	6,573	11.1%
Bite / sting	902	1.5%
Food poisoning	925	1.6%
Unknown	62	0.1%
<b>Total Unintentional</b>	<b>48,380</b>	<b>81.7%</b>
<b>Intentional</b>		
Suspected suicide	5,536	9.4%
Misuse	1,422	2.4%
Abuse	1,379	2.3%
Unknown	130	0.2%
<b>Total Intentional</b>	<b>8,467</b>	<b>14.3%</b>
<b>Other</b>		
Contamination / tampering	89	0.2%
Malicious	256	0.4%
Withdrawal	30	0.1%
<b>Total Other</b>	<b>375</b>	<b>0.6%</b>
<b>Adverse reaction</b>		
Drug	970	1.6%
Food	145	0.2%
Other	367	0.6%
<b>Total Adverse reaction</b>	<b>1,482</b>	<b>2.5%</b>
<b>Unknown</b>	<b>493</b>	<b>0.8%</b>

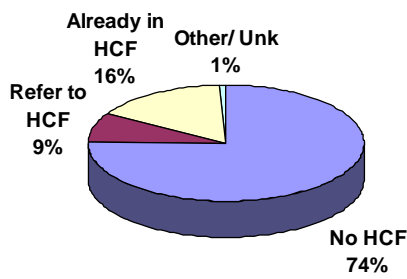
### SITE OF EXPOSURE

The most frequent site of exposure is a residence, while calls for exposures in the workplace account for 2.2% of our calls, a small increase from last year.

<u>Site of Exposure</u>	<u>Number</u>	<u>Percent</u>
Own residence	52,872	89.3%
Other residence	2,252	3.8%
Workplace	1,272	2.2%
Health care facility	155	0.3%
School	793	1.3%
Restaurant / food service	237	0.4%
Public area	541	0.9%
Other	600	1.0%
Unknown	475	0.8%

## TREATMENT LOCATION

The majority of poison exposures either require no treatment or can be treated at the exposure site. The most common treatments at the exposure site include observation and dilution for oral exposures and flushing or irrigating the skin or eyes for dermal or ocular exposures.



<u>Location</u>	<u>Number</u>	<u>Percent</u>
<b>NonHealth Care Facility (HCF)</b>	44,515	75.2%
<b>Referred to HCF by IPC</b>		
Treated and released	1,978	3.3%
Admit to critical care	372	0.6%
Admit to noncritical care	226	0.4%
Admit to psychiatry	185	0.3%
Lost to follow-up/left AMA	541	0.9%
Refused referral	1,734	2.9%
Total Referred	5,036	8.5%
<b>Patient Already in HCF</b>		
Treated and released	4,503	7.6%
Admit to critical care	2,815	4.8%
Admit to noncritical care	633	1.1%
Admit to psychiatry	965	1.6%
Lost to follow-up/left AMA	274	0.5%
Total Ahead in HCF	9,190	15.5%
<b>Other</b>	315	0.5%
<b>Unknown</b>	141	0.2%
	59,197	100.0%

Overall, the IPC referred 5,036 (8.5%) patients for medical care and was consulted

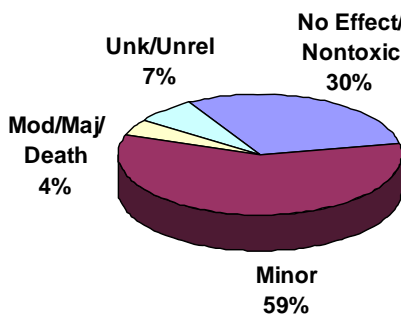
on another 9,190 cases that were already in a health care facility (HCF).

## FOLLOW-UP CALLS

The IPC attempts to make follow-up calls on all cases with the potential for toxicity to the patient to ensure patient compliance with treatment recommendations, direct the management of the case and verify the medical outcome. In 2005, follow-up was made 73,441 times on 25,355 human cases (2.9 calls/case). An additional 55,819 cases or information calls did not require or refused follow-up.

## MEDICAL OUTCOME

The medical outcome is assessed based upon the inherent toxicity of the agent, and the severity of the clinical effects noted during case management. The increased severity in case mix seen since 1990 has been continued in 2005 with a small increase in the percentage of cases with severe toxicity and deaths increasing by 18% compared to 2004.



<u>Medical Outcome</u>	<u>Number</u>	<u>Percent</u>
No effect	11,549	18.3%
Minor effect	10,164	16.1%
Moderate effect	2,349	3.7%
Major effect	398	0.6%
Death	65	0.1%
Death, indirect report	2	0.0%
No follow-up		
Judged nontoxic	7,522	11.9%
Judged Minimal Effects	26,395	41.9%
Potentially Toxic	2,632	4.2%
Unrelated effect	1,775	2.8%

## AGENTS INVOLVED

During 2005, the IPC staff managed 59,197 human poison exposures. Prescription and nonprescription drugs accounted for 52% of these exposures, while an additional 38% were to household products. Plants, animals, industrial and agricultural products were also commonly reported. A single substance was involved in 90.9% of the cases and two substances in 5.9% of cases, but exposures to over nine substances were seen in other cases.

<u>Agent Involved</u>	<u>Number</u>
Analgesics	7,256
Anesthetics	270
Anticholinergic drugs	172
Anticoagulants	154
Anticonvulsants	1,030
Antidepressants	2,724
Antihistamines	1,850
Antimicrobials	1,580
Antineoplastics	38
Asthma therapies	553
Cardiovascular drugs	1,876
Cold and cough preparations	2,903
Diagnostic agents	17
Dietary supplements/herbals homeopathic	558
Diuretics	228
Electrolytes and minerals	741
Eye/ear/nose/throat preparations	458
Gastrointestinal preparations	1,233
Hormones and hormone antagonists	1,224
Miscellaneous drugs	530
Muscle relaxants	612
Narcotic antagonists	5
Radiopharmaceuticals	0
Sedative/hypnotics/antipsychotics	3,677
Serums, toxoids, vaccines	44
Stimulants and street drugs	1,164
Topical preparations	2,858
Veterinary drugs	85
Vitamins	1,551
Unknown drug	342

**Total Drugs 35,733**

<u>Agent Involved</u>	<u>Number</u>
Adhesives/glues	480
Alcohols	1,866
Arts/crafts/office supplies	981
Automotive/aircraft/boat products	425
Batteries	289
Bites and envenomations	1,041
Building and construction products	286
Chemicals	1,115
Cleaning substances (household)	4,972
Industrial cleaners	264
Cosmetics/personal care products	5,802
Deodorizers	566
Dyes	51
Essential oils	213
Fertilizers	204
Fire extinguishers	79
Food products/food poisoning	1,610
Foreign bodies/toys/miscellaneous	3,109
Fumes/gases/vapors	1,239
Heavy metals	390
Hydrocarbons	1,391
Information calls	-
Lacrimators	147
Matches/fireworks/explosives	44
Mushrooms	168
Paints and stripping agents	490
Pesticides - Fumigants	1
Pesticides - Fungicides	21
Pesticides - Herbicides	202
Pesticides - Insecticides	1,237
Pesticides - Repellants	300

<u>Agent Involved</u>	<u>Number</u>
Pesticides - Rodenticides	534
Photographic products	16
Plants	1,660
Polishes and waxes	181
Radioisotopes	2
Sporting equipment	17
Swimming pool/aquarium	304
Tobacco products	234
Weapons of mass destruction	1
Other/unknown nondrug substances	527
<b>Total Non-Drugs</b>	<b>32,459</b>
<b>Total Agents</b>	<b>68,192</b>

Additional information that is useful to note are the most common poisonings in the pediatric age group and intentional exposures.

<u>Pediatric Top Ten</u>	<u>Number</u>
Cosmetics/personal care products	4,520
Cleaning substances (household)	3,204
Analgesics	2,685
Topical preparations	2,461
Foreign bodies/toys/miscellaneous	2,400
Cold and cough preparations	1,789
Pesticides	1,342
Vitamins	1,241
Plants	1,237
Antimicrobials	880

The pediatric top ten changed this year only with the replacement of gastrointestinal preparations with antimicrobials. All substances on the intentional top ten remained the same in exactly the same order as in 2004.

<u>Intentional Top Ten</u>	<u>Number</u>
Analgesics	3,197
Sedative/hypnotics/antipsychotics	2,644
Antidepressants	1,715
Alcohols	1,108
Stimulants and street drugs	620
Antihistamines	566
Anticonvulsants	494
Cold and cough preparations	461
Muscle relaxants	416
Cardiovascular drugs	369

The following table represents the substances seen in the most serious poisonings resulting in major symptoms or death. Hormone and hormone antagonists (up 80%) replaced chemicals and fumes/gases/vapors on the list in the last spot. Serious alcohol exposures decreased to historical levels pushing stimulants and street drugs and cardiovascular agents up to their historical fourth and fifth most common causes. Muscle relaxants and antihistamines traded places also. Analgesics remained the most frequent cause of severe toxicity. Classes with large

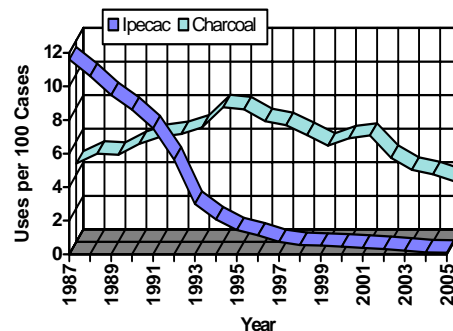
increases included sedative hypnotics at 16% and cardiovascular agents at 30%.

<u>Most Serious Intoxications</u>	<u>Number</u>
Analgesics	233
Sedative/hypnotics/antipsychotics	187
Antidepressants	144
Stimulants and street drugs	63
Cardiovascular drugs	56
Alcohols	45
Anticonvulsants	36
Antihistamines	24
Muscle relaxants	24
Hormones and hormone antagonists	18

## THERAPY

Supportive care is the single most critical component in the care of the poisoned patient. In 4,184 (7.1%) patients no therapy was needed and observation alone was used in an additional 6,225 (10.5%). IPC advice was refused in 1,282 cases (2.2%). Specific therapeutic methods utilized in poisonings included decontamination, antidotal therapy, and enhancing elimination. Decontamination alone was utilized in 36,228 (61.2%) cases, other therapies alone in 3,601 cases (6.1%) and a combination of the two in 2,164 (3.7%). The most common antidotal treatments were oxygen, n-acetylcysteine, benzodiazepines, naloxone, alkalization and antihistamines. A major change in the pattern of n-acetylcysteine use was that the intravenous form is used more than the oral regimen, a switch from 2004. The following table summarizes some specific therapies follows:

<u>Decontamination</u>	<u>Number</u>
Ipecac*	58
Charcoal, single dose	2,143
Charcoal, multiple doses	23
Lavage	102
Cathartic	81
Whole bowel irrigation	7
Other emetic	142
Dilute/irrigate/wash	34,187
Fresh air	1,997
Food/snack	1,693
<b>Total Decontamination</b>	<b>40,433</b>
<b>No Decontamination</b>	<b>20,805</b>
<u>Antidotal / Other Therapy</u>	
Fluids, IV	3,085
Oxygen	927
Benzodiazepines	558
n-Acetylcysteine (PO – 203, IV – 344)	547
Intubation	447
Ventilator	397
Naloxone	291
Antibiotics	284
Alkalization	281
Antihistamines	281
<b>Total Antidotal / Other Therapy</b>	<b>9,986</b>



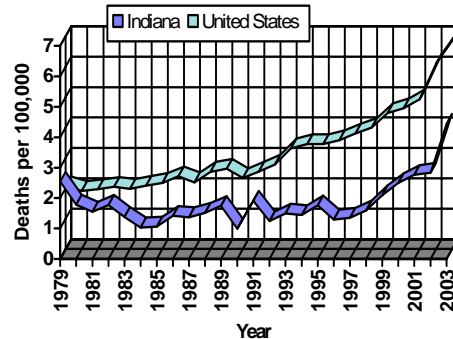
## Enhancement of Elimination

Hemodialysis	44
Hemoperfusion	0
Other	8
<b>Total Enhancement</b>	<b>52</b>

Use of activated charcoal again greatly exceeded that of syrup of ipecac. Syrup of ipecac use has dropped 99% in the past thirteen years (12% in 2005 alone), while the use of activated charcoal initially increased by 73% and now shows a continued decrease since then reflecting changes in usage in the hospital setting. *Ninety-five percent of the time ipecac was used, the IPC did not recommend its use.\**

## MORTALITY

Data from the National Center for Injury Prevention and Control showed 275 unintentional poison deaths in Indiana for 2003, an increase of 58%. The average number since the inception of the Poison Center has been 97 per year down from an average of 116 per year prior to 1979. Indiana's unintentional death rate (4.44/100,000) continues to be well below the national figure for 2003 (6.83/100,000) although it seems to be increasing more rapidly compared to the national rate after years of lagging behind. National data suggests that the majority of this increase in is due to unintentional overdoses with drugs of abuse in the 30-49 year old age range.



The Indiana Poison Center was consulted on 61 patients who died during 2005. Most of the deaths (44) were intentional in nature (22 suspected suicide and 16 abuse). In some cases, the cause of death was eventually determined not to be related to the exposure.

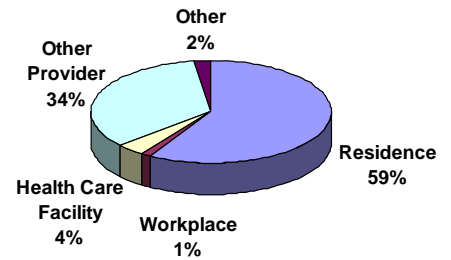
<u>Age</u>	<u>Sex</u>	<u>Agent (Reason)</u>
2m	Unk	pseudoephedrine, dextromethorphan, senna (unknown)
6m	M	amoxicillin (therapeutic error)
15m	F	gasoline (unintentional – general)
5y	M	sertraline, hydrocodone, acetaminophen , thioridazine, clozapine (unintentional - general)
8y	F	alcohol , chlorpheniramine, phenylephrine, methscopolamine (unknown)
11y	M	bupivacaine (therapeutic error)
13y	F	morphine (abuse)
14y	M	methadone (abuse)
17y	M	methamphetamine , quetiapine , hydrocodone, acetaminophen , clonazepam, alprazolam (abuse)
18y	M	cocaine, methadone , alprazolam (abuse)
18y	M	fluoxetine, marijuana, methadone (abuse)
18y	M	methadone (abuse)
18y	F	alprazolam (unknown)
19y	M	oxycodone, methadone , cocaine, clonazepam, fentanyl (abuse)
20y	M	tramadol, marijuana, clonazepam , fentanyl (abuse)
20y	F	methamphetamine (intentional misuse)
21y	M	alprazolam, hydrocodone, acetaminophen (intentional unknown)
24y	F	tramadol (abuse)
25y	M	cocaine (intentional misuse)
25y	F	acetaminophen (suicide)
27y	M	cocaine, antifreeze , midazolam (misuse)
27y	M	cocaine, benzodiazepine (abuse)
29y	F	diphenhydramine, citalopram, ethanol (unknown)
32y	F	acetaminophen, opioid (suicide)
32y	M	clonazepam , alprazolam , alprazolam, methadone (intentional unknown)
33y	F	cocaine, heroin (abuse)
36y	M	hyoscyamine , prednisone, hydroxyzine , olanzapine, hydrocodone, acetaminophen, nortriptyline (suicide)
36y	F	heparin, oxycodone (abuse)
36y	M	glipizide , metformin, glipizide (suicide)
37y	M	morphine (suicide)
38y	F	cocaine, amitriptyline , cyclobenzaprine, heroin (abuse)
39y	F	propoxyphene, acetaminophen, alcoholic beverage, hydrocodone, acetaminophen (suicide)
39y	F	fentanyl (suicide)
41y	F	gabapentin, oxycodone , quetiapine (intentional unknown)
41y	F	bupropion (suicide)
41y	F	acetaminophen (suicide)
41y	F	heroin (abuse)

<u>Age</u>	<u>Sex</u>	<u>Agent (Reason)</u>
42y	M	propofol (therapeutic error)
42y	F	secobarbital (suicide)
44y	M	acetaminophen (therapeutic error)
45y	F	propranolol (suicide)
46y	F	propoxyphene, acetaminophen, morphine, tramadol, ibuprofen, oxycodone (suicide)
47y	F	ibuprofen, acetaminophen (suicide)
48y	F	codeine, acetaminophen, gabapentin, ethanol , fluoxetine (suicide)
48y	F	acetaminophen, temazepam, hydrocodone , oxazepam (therapeutic error)
50y	M	morphine , hydrocodone, acetaminophen (suicide)
52y	F	lisinopril, metoprolol (suicide)
54y	M	hydrocodone, acetaminophen , metoprolol (suicide)
57y	M	marijuana, opioid, benzodiazepine (unknown)
57y	F	cocaine, heroin (abuse)
59y	F	hydrocodone, acetaminophen (intentional unknown)
63y	F	phenobarbital , carbon monoxide, lansoprazole, diphenhydramine , diazepam, carbamazepine, atorvastatin, nitroglycerin, albuterol, mometasone, enalapril , vitamin, levothyroxine (suicide)
63y	M	digoxin (suicide)
63y	M	metformin (therapeutic error)
64y	M	nifedipine (suicide)
67y	F	clonidine , diazepam (suicide)
83y	F	digitoxin (therapeutic error)
86y	F	digoxin (therapeutic error)
89y	F	verapamil (therapeutic error)
adult	F	morphine , carbaryl, amitriptyline (suicide)
adult	M	isopropyl alcohol, ethanol, acetaminophen (abuse)

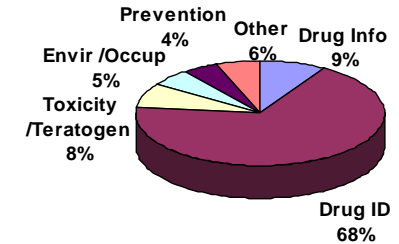
The most common substance classes involved in deaths reported to the IPC were opiates (40 cases, including 9 hydrocodone, 6 methadone and 5 morphine), acetaminophen (18 cases) and benzodiazepines (17 cases), cardiac drugs (12 cases), stimulants/stree drugs (10 cases, 8 cocaine, 2 methamphetamine) and. antidepressants (7 cases).

### **INFORMATION CALLS**

In 2005, the IPC staff responded to 19,819 inquiries from health professionals and the general public when no poison exposure had occurred. Fifty-nine percent of the calls were received from the general public, 58% in a residence and 1% in the workplace.

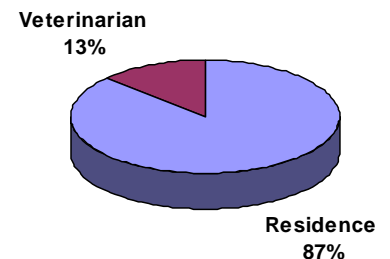


The information calls can be divided into several categories: 1) drug identification / information, 2) environmental, 3) medical, 4) occupational, 5) toxicity / symptoms, 6) prevention and safety, 7) teratogenicity and 8) other.



### **ANIMAL POISONINGS**

In 2005, the IPC managed 3,662 poisonings to domestic animals, a 4.5% increase from 2004. Calls were received primarily from the pet's owners although veterinarians generated a significant proportion.



Eight out of the top ten animal exposures were also seen in children. Significant differences included a very large percentage of insecticide / rodenticide and plant exposures as compared to children.

<u>Animal Top Ten</u>	<u>Number</u>
Pesticides	823
Cleaning substances (household)	245
Plants	230
Analgesics	228
Foreign bodies/toys/miscellaneous	175
Topical preparations	142
Antimicrobials	141
Cardiovascular drugs	113
Cosmetics/personal care products	112
Antidepressants	93

### **EDUCATION PROGRAMS**

Personnel from the IPC teach health care professionals basic and advanced techniques in the management of poison emergencies and provide assistance, consultation, and

programs in teaching poison prevention to private citizens.

### Professional Education

Professional education activities include the Annual Regional Toxicology Symposium, a quarterly education bulletin (TOXI-GRAM), and numerous inservices and lectures.

### Health Professional Education

#### Contact Hours Supervised Experience in Poison Center/Toxicology Service

Medical Residents (45)	7,200
Doctor of Pharmacy Students (5)	800
Doctor of Pharmacy Residents (5)	640
Family Practice Residents (2)	8
Medical Students (2)	168
Pharmacy Students (4)	16
Nursing Students (11)	36

#### Academic and Continuing

Education Lectures Presented	36
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The IPC sponsored its 21<sup>st</sup> Annual Toxicology Seminar: *Poisoning Throughout the Ages* in May that was attended by over 118 health care professionals from throughout Indiana and surrounding states. Featured presentations centered on significant poisoning events throughout history including methanol and “Ginger Jake” epidemics, absinthe, warfare agents, celebrity poisonings, medical murders, cult poisonings and pharmaceutical disasters. In addition, staff from the center participated in the Midwest Regional Toxicology Conference held in April in Louisville, KY.

Under the guidance of Daniel Rusyniak, M.D. the two-year Medical Toxicology Fellowship program started in 1994 continues to draw outstanding physicians in training. This fellowship program is one of only 14 accredited by the American Council for Graduate Medical Education in the United States. All our past fellows have passed their Medical Toxicology boards and are practicing in Wisconsin, Indiana, Virginia, Missouri, Michigan and Arizona. Our second year fellow, Dr. Danyal Ibrahim was joined in August by Dr. Blake Froberg after finishing a Pediatrics Residency at Indiana University in Indianapolis.

The staff of IPC also contributed to the medical toxicology literature in 2005 with 8 journal articles, 4 consensus treatment guidelines 4 book chapters and three abstracts presented (two at the North American Congress of Clinical Toxicology and one at the Society for Academic Emergency Medicine).

#### Journal Articles

- Holstege CP, Mitchell K, Barlotta K, Furbee RB. Toxicity and drug interactions associated with herbal

products: Ephedra and St. John’s Wort. *Med Clin N Am* 2005;89(2):1225-1227.

- Kao LW, Furbee RB. Drug induced QT prolongation. *Med Clin North Am* 2005, 89(2):1125-1144.
- Kao LW, Nanagas KA. Carbon Monoxide Poisoning. *Med Clin North Am* 2005; 89(6): 1161-95.
- O’Connor AD, Rusyniak DE, Bruno A. Cerebrovascular and cardiovascular complications of alcohol and sympathomimetic drug abuse. *Med Clin N Am* 2005; 89(6):1343-58.
- Rusyniak DE, Pascuzzi RM. Historical Neurotoxins: What we have learned from toxins of the past about diseases of the present. *Neurol Clin N Am* 2005; 23(2):337-352.
- Rusyniak DE, Sprague JE. Toxin induced hyperthermic syndromes. *Med Clin N Am* 2005; 89(6):1277-96.
- Rusyniak DE, Tandy SL, Hekmatyar SK, Mills E, Smith DJ, Bansal N, MacLellan D, Harper ME, Sprague JE. The role of mitochondrial uncoupling in 3,4-methylenedioxymethamphetamine-mediated skeletal muscle hyperthermia and rhabdomyolysis. *J Pharmacol Exp Ther* 2005; 313(2):629-39. Epub 2005 Jan 11.
- Sprague JE, Moze P, Caden D, Rusyniak DE, Holmes C, Goldstein DS, Mills EM. Carvedilol reverses hyperthermia and attenuates rhabdomyolysis induced by 3,4-methylenedioxymethamphetamine (MDMA, Ecstasy) *Crit Care Med* 2005; 33(6):1311-6.

#### Consensus Treatment Guidelines

- Caravati EM, Erdman AR, Christianson G, Manoguerra AS, Booze LL, Woolf AD, Olson KR, Chyka PA, Scharman EJ, Wax PM, Keyes DC, Troutman WG. Ethylene glycol exposure: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol* 43(5):327-45, 2005.
- Manoguerra AS, Erdman AR, Booze LL, Christianson G, Wax PM, Scharman EJ, Woolf AD, Chyka PA, Keyes DC, Olson KR, Caravati EM, Troutman WG. Iron ingestion: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol* 43(6):553-70, 2005.
- Olson KR, Erdman AR, Woolf AD, Scharman EJ, Christianson G, Caravati EM, Wax PM, Booze LL, Manoguerra AS, Keyes DC, Chyka PA, Troutman WG. Calcium channel blocker ingestion: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol* 43(7):797-822, 2005.
- Wax PM, Erdman AR, Chyka PA, Keyes DC, Caravati EM, Booze L, Christianson G, Woolf A, Olson KR, Manoguerra AS, Scharman EJ, Troutman WG. Beta-blocker ingestion: an evidence-based consensus guideline

for out-of-hospital management. *Clin Toxicol* 43(3):131-46, 2005.

#### Book Chapters

- Murphy P, Furbee RB. Opioid Poisoning. In Harwood-Nuss A, Linden C, and Wolfson A, (eds). *The Clinical Practice of Emergency Medicine*, Fourth edition. Lippincott, Williams, and Wilkins, Philadelphia, 2005.
- Rusyniak DE, Furbee RB. Antihistamines. In: Brent J, Burkhart K, Donovan W, et al (eds). *Diagnosis and Management of the Critically Poisoned Patient*. Elsevier Mosby Inc. Philadelphia, PA, 2005.
- Snyder LK, Kao LW, Furbee RB. Colchicine, Podophyllin, Vincristine, and Vinblastine. In: Brent J, Burkhart K, Donovan W, et al (eds). *Diagnosis and Management of the Critically Poisoned Patient*. Elsevier Mosby Inc. Philadelphia, PA, 2005.
- Weir WB, Kao LW. Hydrofluoric Acid Toxicity. In: *American Academy of Emergency Medicine Toxicology Handbook* 2005.

#### Abstracts

- O’Connor AD, Kao LW, Furbee RB. Arsenic Gas Poisoning Following Occupational Exposure. *J Tox Clin Toxicol* 2005; 43(6):662.
- O’Connor AD, Kao LW. QRS Prolongation Following Massive Methamphetamine Ingestion. *J Tox Clin Toxicol* 2005; 43(6):746.
- Rusyniak DE, Inui TS, Zaretsky DV, DiMicco JA. Neurons in the dorsomedial hypothalamus mediate physiological effects of MDMA in anesthetized rats. (SAEM 2005 Annual Meeting)

#### Public Education

IPC continues to promote the message that children should always check with an adult before touching anything they are not sure of. Education for children and their caregivers is focused on teaching the concept that poison is not restricted to particular products but can be anything that can harm a person or animal if it is used the wrong way. Educational materials for children consist of activity sheets for preschool through elementary ages as well as curriculums for preschool and elementary aged children. All of the written materials can be duplicated.

IPC added some new education materials to its inventory in 2005. A poison prevention and first aid module was developed for elementary students. Temporary tattoos bearing a cartoon and the poison emergency number were also developed for young children. A handout entitled, “How to Create Poison Prevention Displays” was developed to assist community agencies with resources for local health fairs. IPC also continues to lend “look-a-like boxes” for community

events. These boxes show potentially poisonous items that look like non-poisonous items and demonstrate how easily a poison can be mistaken for something that is good to eat or drink.

Prevention materials targeted to the Hispanic population were also increased with the addition of a magnet displaying the emergency number and relevant information in Spanish. In an effort to increase outreach to populations currently underutilizing the poison center, IPC wrote and received a grant from the Clarian Health Values Fund to conduct a two year outreach program to Hispanic residents of Indiana.

“Making the Right Call” is an instructor training workshop with the goal of recruiting volunteers interested in teaching injury prevention. This program is intended to expand public education efforts and establish a consistent poison prevention message throughout the state. Participants attend a free three-hour workshop and learn how to conduct a simple program for poison prevention in their community. The IPC Coordinator for Poison Prevention is available to conduct this workshop in any Indiana county upon request. The program has a strong evaluation component to determine its success. As of December 31, 2005, 350 instructors from 54 Indiana counties have been trained to deliver this public education program.

IPC has continued to network with other agencies in the state. Safe Kids, member hospitals and member physicians have continued to be partners with the poison center. Additionally, IPC has made efforts to forge links with parish nurses, fire and law enforcement professionals, obstetric and pediatric physicians, EMS agencies and Head Start programs. IPC continues to look for partnerships with other agencies that have an interest in injury prevention.

Public Education Activities	
Pieces of Poison Prevention Material Distributed	391,352
TV & Radio appearances	8
Newspaper / Magazine interviews	11
News Releases Distributed	13
Public Education Presentations	74
Estimated Audience	5,078+
<u>TOXIC TRIVIAS Published</u>	
NPPW Is Here Again (Spring)	
Warm Weather Safety (Summer)	
Wrapping Up the Year Safely (Fall)	

National Poison Prevention Week activities included distributing press packets to all print and broadcast news organizations in the state.

Resource packets, including ideas to promote the week and promotional items, were sent to a wide variety of organizations throughout the state. A poster competition was held for elementary students and was promoted through school nurses and Scout leaders. Nurses and troop leaders received a poison prevention and first aid teaching curriculum along with contest rules and instructions.

The news release distribution program in conjunction with the Indianapolis FDA Office continued to reach all print and broadcast media in the State as well as county health organizations. The quarterly newsletter, “Toxic Trivia” was published three times in 2005. The list of people subscribing to this free newsletter continues to grow with the addition of state legislators, trained instructors and other community members who are interested in receiving useful news from the world of poison prevention.

Cooperative long-term efforts such as these maintain a coordinated statewide poison prevention education program and bolster the efforts of the IPC to increase awareness of poison safety measures and reduce death and injury from poisoning.

## FINANCIAL REVIEW

### Expenses

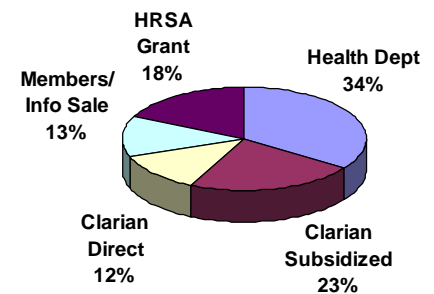
Recent studies have shown that *every dollar* spent on poison centers returned *\$6.50* in medical care cost savings through the prevention of unnecessary hospital visits for poison exposures. Factoring in medical inflation rates, over the past 25 years, this represents savings of almost **\$168 million** in Indiana.

Total direct expenses have risen from \$117,369 in 1979 to \$1,527,394 in 2005 with a total cost per human poison case of \$33 which is well below the national average of \$47 (from 2004) and a cost per productive call of \$24.

Personnel	\$1,511,333
Clarian Health Facilities	\$348,595
Telephone	\$37,024
Supplies (w/information resources)	\$54,739
Equipment/Other	\$21,524
<b>Total Expenses</b>	<b>\$1,973,216</b>

### Revenues

Direct state funding through the Indiana State Department of Health has decreased this year to \$683,831. This was due to problems with deliverables associated with the syndromic toxicosurveillance efforts on behalf of the ISDH’s Bioterrorism monitoring program. Funding through that source is no longer available. The percent of direct state funding, which had increased from a low of 38% in 2002 to 44% in 2004 has now dropped to 35% of expenses compared to 90% in 1996. This decrease in percentage of state funding has led to the first increase in membership fees for the Member Hospital Program for 2006. Membership fees have been increased to \$3,500 per year and non-member hospitals are now charged \$200 per consultation that they generate. Clarian Health provides up to \$100,000 in direct support as needed and also contributes space and other subsidized expense for the operation of the IPC. As can be seen, due to the lack of state funding, Clarian’s support of the poison center was well above projected. The fourth full year of Federal support of the poison center was in 2005 and contributes about 18% of the operating budget.



Indiana State Department of Health	\$683,831
Clarian Health – Subsidized	\$445,822
Federal HRSA Grant	\$356,459
Members / Information Sales	\$254,641
Clarian Health – Direct	\$232,462
<b>Total Revenues</b>	<b>\$1,973,216</b>

## STAFF MEMBERS

### Our Specialists in Poison Information

The backbone of the Indiana Poison Center is its highly trained and dedicated Specialists in Poison Information: registered nurses and pharmacists who handle the emergency calls 24 hours a day.

The Specialists in Poison Information provide precise, immediate information in situations where seconds could make the difference between life and death. The Center's poison information staff are required to be certified by the American Association of Poison Control Centers. Currently, all staff that are eligible have either fulfilled the requirements or are currently working toward certification.

## Our Administrative Team

James B. Mowry, Pharm.D., Director of the IPC since August 1981, is a Diplomat of the American Board of Applied Toxicology, a Fellow of the American Academy of Clinical Toxicology, and has more than 27 years of experience in pharmacology and clinical toxicology.

Serving as the Center's Medical Director is Brent Furbee, M.D. Dr. Furbee is board certified in medical toxicology and emergency medicine with more than 25 years of experience in emergency medicine and medical toxicology.

Mary Wermuth, MD, Louise Kao, MD, Kristine Nanagas, MD and Daniel Rusyniak, MD, all graduates of our medical toxicology fellowship, act as Associate Medical Directors with primary emergency medicine practices at Methodist and Wishard Memorial Hospitals respectively. Dr. Rusyniak assumed the position as director of the medical toxicology fellowship program in July 2005.

Gwenn Christianson, RN, MSN, CSPI, through funding provided by the Federal HRSA grant, began a position as Team Leader for the Indiana Poison Center in 2004. Gwenn's responsibilities include special projects, quality assurance and additional administrative support for the center. Gwenn has been a Specialist in Poison Information since 1988 and is actively involved a number of committees on the national level in the American Association of Poison Control Centers.

Barbara Cole, BS, also joined the Indiana Poison Center in 2004 as Coordinator – Poison Prevention. Mrs. Cole brings a vast experience in public health education to the poison center and is responsible for coordinating our state wide poison prevention program including evaluation, re-assessment, design and production.

Maggie Showalter serves as Administrative Secretary for the Indiana Poison Center and Medical Toxicology of Indiana. In addition to her secretarial duties she acts as liaison with Member Hospitals, coordinates patient

<b>Indiana Poison Center Staff</b>	
<p><b>Director</b> James B. Mowry, PharmD</p> <p><b>Medical Director</b> R. Brent Furbee, MD</p> <p><b>Associate Medical Directors</b> Louise Kao, MD Kristine Nanagas, MD Daniel Rusyniak, MD</p> <p><b>Associate Medical Director/ HBO Coordinator</b> Mary Wermuth, MD</p> <p><b>Administrative Secretaries</b> Maggie Showalter <b>Jennifer Connor</b></p> <p><b>Corrdinator – Poison Prevention</b> Barbara Cole, BS</p> <p><b>Medical Toxicology Fellowship</b> Daniel Rusyniak, MD, Director Danyal Ibrahim, MD, Fellow Blake Froberg, MD, Fellow</p>	<p><b>Team Leader</b> Gwenn Christianson, RN, MSN, CSPI*</p> <p><b>Specialists in Poison Information</b> Lynn Ballentine, BSN, CSPI* (Chair, Public Education) Jo Beckerich, BSN, MS, CSPI* Susan Boots, RN, CSPI* David Burns, BSN, CSPI* Gwenn Christianson, RN, MSN, CSPI* Diane Ely, RN, CSPI* Susan Jackson, RN, CSPI* Jo Johnson, RN, CSPI* Karen Lytle, BSN, CSPI* Tonya Mains, BSN, MS Susie McKnight, RN, CSPI* Laura Miller, Pharm.D., CSPI* Warren Patitz, BA, RN, CSPI* Jayne Santfleben, BSN, CSPI* Joanne Smith, BA, RN, CSPI* Laura Smith, BSN, CSPI* Charissa Weiss, BSN</p> <p>* AAPCC Certified Specialist in Poison Information</p>

appointments for the occupation toxicology clinic and coordinates medical toxicology rotations for the medical residents from Indiana University School of Medicine and the administrative aspects of the medical toxicology fellowship. She is assisted in her responsibilities on a part-time basis by Jennifer Connor, who was hired late in 2005.

## CONSULTANTS

The IPC maintains a relationship with a number of expert consultants in many areas related to toxicology should a question be found that our usual and customary resources cannot handle. We would like to acknowledge their contributions to the program.

Robert J. Alonso, M.D.  
Robert T. Anger, M.S.  
Rita E. Banes  
Waqar Bhatti, Ph.D.  
James A. Brenneman, Ph.D.

Michael Buran, M.D.  
Mark A. Carfagra, Ph.D.  
Charles B. Carter, M.D.  
R. Lyle Christensen, PhD  
Lola Cook MS  
Peg Davee, MS  
Peter A. Dillman  
Quentin B. Emerson, M.D.  
Michael Evans, Ph.D.  
William E. Fields, Ph.D.  
Charlene Graves, M.D.  
Alan R. Hanks, Ph.D.  
Steven Hooser, DVM. Ph.D.  
Daniel McCoy, Ph.D.  
John W. Mead  
John Pless, M.D.  
James E. Robbers, Ph.D.  
Charles Sinclair, DVM, MSPH  
Sam S. Slosman  
Kenneth Sun, Ph.D.  
Walter Sundberg, Ph.D.  
Michael R. Tansey, Ph.D.  
David Weaver, M.D.

## **MEMBER HOSPITALS FOR 2005**

It is with great appreciation that we recognize the support and contributions made by the following people and institutions to the Indiana Poison Center.

The Indiana Poison Center Member Hospital Network was significantly revised in 1996 in response to decreasing state funding. The membership fee, which had been \$1,000 for many years, was increased to \$3,000 per year. In addition, hospitals that chose not to join the network, were charged \$150 per poison consultation generated by their hospital. Starting January 2006, fees associated with the member hospital program will increase to \$3,500 and \$200 respectively. Full or partial year membership in the network has increased by 80%, from 42 in 1995 to 78 members in 2005, a decrease from 80 members in 2004.

Ball Memorial Hospital, Muncie	Methodist Hospital (Northlake), Gary
Bedford Regional Medical Center, Bedford	Methodist Hospital (Southlake), Merrillville
Blackford County Hospital, Hartford City	Morgan County Memorial Hospital, Martinsville
Bloomington Hospital, Bloomington	Parkview Huntington Hospital, Huntington
Bloomington Hospital Orange Co., Paoli	Parkview LaGrange Hospital, LaGrange
Bluffton Regional Medical Center, Bluffton	Parkview Memorial Hospital, Fort Wayne
Cameron Memorial Community Hospital, Angola	Parkview Noble Hospital, Kendallville
Columbus Regional Hospital, Columbus	Parkview Whitley Memorial Hospital, Columbia City
Community Hospital, Munster	Perry County Memorial Hospital, Tell City
Community Hospital Anderson, Anderson	Porter Memorial Hospital, Valparaiso
Community Hospital East, Indianapolis	Pulaski Memorial Hospital, Winamac
Community Hospital North, Indianapolis	Putnam County Hospital, Greencastle
Community Hospital South, Indianapolis	Reid Health Care Services, Richmond
Daviess Community Hospital, Washington	Riverview Hospital, Noblesville
Deaconess Hospital, Evansville	Schneck Medical Center, Seymour
Dearborn County Hospital, Lawrenceburg	St. Anthony Medical Center, Crown Point
Decatur County Memorial Hospital, Greensburg	St. Clare Medical Center, Crawfordsville
DeKalb Memorial Hospital, Auburn	St. Elizabeth Medical Center, Lafayette
Dunn Memorial Hospital, Bedford	St. Francis Hospital Center, Beech Grove
Elkhart General Hospital, Elkhart	St. Francis Hospital South, Indianapolis
Fayette Memorial Hospital, Connersville	St. John's Health System, Anderson
Gibson General Hospital, Princeton	St. Joseph Community Hospital, Mishawaka
Good Samaritan Hospital, Vincennes	St. Joseph Regional Medical Center, South Bend
Goshen General Hospital, Goshen	St. Joseph's Hospital of Marshall Co., Plymouth
Greene County General Hospital, Linton	St. Margaret Mercy Hospital, Dyer
Hendricks Regional Health, Danville	St. Margaret Mercy Hospital, Hammond
Henry Memorial Hospital, New Castle	St. Mary Medical Center, Hobart
Indiana University Hospitals, Indianapolis	St. Vincent Clay Hospital, Brazil
Jasper County Hospital, Rensselaer	St. Vincent Frankfort Hospital, Frankfort
Jay County Hospital, Portland	St. Vincent Hospital, Indianapolis
Lafayette Home Hospital, Lafayette	St. Vincent Hospital - Carmel, Carmel
LaPorte Hospital, LaPorte	St. Vincent Williamsport Hospital, Williamsport
Major Hospital, Shelbyville	Sullivan County Community Hospital, Sullivan
Margaret Mary Community Hospital, Batesville	Terre Haute Regional Hospital, Terre Haute
Marion General Hospital, Marion	Tipton Co. Memorial Hospital, Tipton
Memorial Hospital, Jasper	White County Memorial Hospital, Monticello
Memorial Hospital, Logansport	Wishard Memorial Hospital, Indianapolis
Memorial Hospital of South Bend, South Bend	Witham Health Services, Lebanon
Methodist Hospital, Indianapolis	Woodlawn Hospital, Rochester

The following hospitals, while not members, supported the Indiana Poison Center through use of the poison center on the fee per call basis.

Clarian West Medical Center, Avon  
 Clark County Memorial Hospital, Jeffersonville  
 Dupont Hospital, Fort Wayne  
 Floyd Memorial Hospital, New Albany  
 Howard Community Hospital, Kokomo  
 Johnson Memorial Hospital, Franklin  
 Kosciusko Community Hospital, Warsaw  
 Rush Memorial Hospital, Rushville  
 St. Joseph Memorial Hospital, Kokomo

St. Joseph's Hospital, Huntingburg  
 St. Mary's Medical Center, Evansville  
 St. Mary's of Warrick County Hospital, Booneville  
 St. Vincent Mercy Hospital, Elwood  
 St. Vincent Randolph Hospital, Winchester  
 Starke Memorial Hospital, Knox  
 Union Hospital, Terre Haute  
 West Central Community Hospital, Clinton  
 Westview Hospital, Indianapolis

### OTHER INDIANA POISON CENTER DATA SETS

The annual Indiana Poison Center statistical data also includes other frequency distributions and cross-tabulations of selected data items. Copies of these reports are available upon request.

<u>Rpt #</u>	<u>Report Title</u>	<u>Database</u>	<u>Rpt #</u>	<u>Report Title</u>	<u>Database</u>
3	Month by Call Type	All Calls	40	Ipecac by Age by Management Site	Human
4	Patient Type by Multiple	Exposures	41	Charcoal by Age/Mgmt Site	Human
5	Months by Patient Type	Exposures	42	Reason by Exposure Chronicity	Human
6	Acute/Chronic	Human	43	Route of Exposure by Age	Human
8	Callsite Codes by Call Type	All Calls	44	Route of Exposure by Reason	Human
10	Exposure to Multiple Substances	Human	45	Management Site by Age	Human
11	Route of Exposure	Human	46	Treatment by Management Site	Human
12	Frequency of Clinical Effects	Human	47	Decontamination by Management Site	Human
13	Distribution of Clinical Effects	Human	48	Other Therapy by Management Site	Human
15	Management Site by Referral Pattern	Human	51 A	Medical Outcome by Age/ Lumped	Human
16	Initial HCF by Referral Pattern	Human	51 B	Medical Outcome by Age/ Decades	Human
17	Final HCF	Human	52	Log by Generic Categories	Human
18	Initial HCF by Disposition	Human	53	Log by Specific Products	Human
19	Decontamination and Therapeutic Intervention	Human	54	Generic Codes by Category by Call	All Calls
23	Duration of Effects by Medical Outcome	Human	55	Generic Codes by Category by Age	Human
24 A	Day of Week by Hour	Human	56	Generic Codes by Category by Reason	Human
24 B	Day of Week by Hour	All Calls	57	Generic Codes by Category by Outcome	Human
25	Call Site by Call Type	All Calls	58	Generic Codes by Category by Mgmt Site	Human
26	Age by Gender	Human	59 A	Caller State, County by Call Type	All Calls
27	Age (Year/Month/Day by Gender)	Human	59 B	Caller State, City by Call Type	All Calls
28	Age by Trimester of Pregnancy	Human	60	Caller State by Call Type	Human
29	Pregnancy Duration	Human	65	Patient Species	Exposures
30	Initial HCF by Age	Human	72	Medical Outcome by Exposure Route	Human
31	Reason by Age (Adults lumped)	Human	73	Age, Reason, HCF, Outcome	
32	Reason by Age (Adults in decades)	Human		Summary by Generic Code	Human
33	Reason by Gender	Human	77	Number of Patients Involved in Poisoning Incidents	Human
34	Reason by Term of Pregnancy	Human	79	Scenario by Age	Human
35	Route by Management Site	Human	80	Scenario by Reason	Human
36	Clinical Effects by Age	Human	81	Scenario by Outcome	Human
37	Clinical Effects by Reason	Human	82	Scenario County by Age	Human
38 A	Medical Outcome by Reason Group	Human	00	State, County by Age in Years (Adults in Decades)	Human
38 B	Medical Outcome by Reasons	Human			
39	Medical Outcome by Mgmt Site	Human			