

*National Pesticide
Telecommunications
Network*

1995 Annual Report

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*National Pesticide
Telecommunications
Network*

**1995 Annual Report:
April 1, 1995 - March 31, 1996**

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DISCLAIMER

Material presented in this report is based on information as provided to NPTN by individuals who have contacted NPTN for information or to report an incident. None of this information has been verified or substantiated by independent investigation by NPTN staff, laboratory analysis, or any other means. Thus, if a person alleges/reports a pesticide incident, it likely will be recorded as an incident by NPTN. NPTN qualifies the information by assigning a Certainty Index (CI; an indication of the degree of certainty that the purported incident was related to pesticide exposure) ranging from 1 = "definite" to 5 = "unrelated." NPTN makes no claims or guarantees as to the accuracy of the CI or other information presented in its reports, other than that NPTN has done its best to accurately document and report the information provided to NPTN.

National Pesticide Telecommunications Network
1995 Annual Report: April 1, 1995 - March 31, 1996

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Executive Summary - NPTN 1995 Annual Report

Note: For a complete record of the accomplishments of NPTN for the 1995 operational year, the reader is directed to: the 12 monthly reports and 4 quarterly reports (submitted earlier), in addition to the "1995 Annual Report." This annual report covers the NPTN grant year: April 1 through March 31.

Organizationally -

- NPTN began operations at Oregon State University on April 1, 1995. This involved hiring of pesticide specialists, remodeling of space to house NPTN, purchase of computers to establish a computer network, development of a pesticide incident data base for recording and managing call information, acquisition of pesticide resources, and implementing a telephone system for access for callers to NPTN and for directly connecting the caller with the Oregon Poison Center or the National Animal Poison Control Center, as appropriate.
- During the first year of operation, NPTN updated many reference materials transferred from Texas Tech, created and/or acquired many new electronic and hard copy pesticide reference materials, and established extensive referral lists. Pesticide specialists were provided with targeted training in the pesticide/toxicology areas, including exposure assessment and indoor air quality, structural pest control, and cholinesterase testing. A UNIX computer was purchased and installed to be used for the NPTN World Wide Web site. The NPTN pesticide label and MSDS files were updated

Operationally -

- NPTN answered 17,775 calls during its first operational year. Seventy-five percent of the inquiries were received between March and October, coinciding with that part of the year where most pest pressures are the highest. Table 3.1
- The majority of calls (89.3%) were for information only, i.e., not related to an incident; 7.5% related to exposure concerns, and 3.2% concerned other non-health-related pesticide incidents. Table 3.6
- By far the greatest number of calls (47.7%) were health-related, whereas 17.1% were for information about pesticide usage, and 8.7% were of a regulatory nature. Table 3.5. Examples of "health-related" calls include:
 - Since applying a pesticide to the inside of my home to control fleas, I feel nauseous, have a headache, and have had diarrhea? Could it be related to the pesticide? What should I do?
 - Will the pesticide to be used in my home harm my unborn fetus or my other children?
 - Is it safe for my children to play on the lawn after its treated for weeds?
 - My neighbor used pesticides in his yard and some drifted onto my garden. Can I eat the vegetables?
 - Since being exposed to a pyrethroid, I've had difficulty breathing. Do these chemicals cause asthma?
- Of the 17,775 calls, 10.9% of calls (1,944) involved pesticide incidents, while 40.6% (7,215 calls) were for information about specific pesticide active ingredients or products, and 44.9% (7,973 calls) were for general information about pesticides and pesticide-related issues. Table 3.2. Examples of pesticide incidents calls include:
 - The PCO applied pesticides all over the inside of my home to kill termites. Now my children are sick - upset stomach, listless, have diarrhea, and won't eat. What can I do?
 - Caller set off 14 flea bombs in April - in July she set off 12 more. Her family has been sick since July - headache, etc.. She had numbness in her lips and hands (left mostly). Her husband had severe pains in his stomach. Her sinuses are dry. Could this be related to the bombs? When will it go away?
 - Caller exposed to drift from aerial application - wet with spray. Will it make her sick?
 - Pesticide container exploded in caller's basement - how can it be cleaned up? She feels sick..
- Of the 1,944 incident calls, 17.9% of the calls were assigned a certainty index of 1 or 2; thus, being judged to have been either definitely or probably caused by the pesticide in question. Table 3.11

NPTN Executive Summary - 1995

- The active ingredient - chlorpyrifos - generated more inquiries (1,852) (corresponding to 10.4% of all calls, and 20.2% of pesticide-specific calls, to NPTN) than any other single active ingredient. Of these, 19.8% (370) were incident calls and 80.2% were inquiries for general information. Of the 370 chlorpyrifos incident calls, 20.3% were assigned a certainty index of 1 (definite) or 2 (probable). The relatively large number of calls about chlorpyrifos is likely related to its being one of the most widely used chemicals in and around the home. Table 3.9 and Figure 3.3
- For the remaining top 25 active ingredients involved in incidents, there were a total of 964 incidents, with 19.8% of them assigned a certainty index of 1 or 2. It is interesting to note that the proportion of chlorpyrifos incidents assigned a certainty index of 1 or 2 was not significantly different than for the remaining top 24 pesticides taken as a group. Most of the reported incidents involved humans (71.7%) and 11.9% involved animals. Table 3.10 and Figure 3.4
- All told, there were 2,054 victims involved in the incidents reported to NPTN - 68.3% were human, 15.0% animal, and 16.7% other (e.g., building, environment). Of the human victims, there were 32.9% male, 49.5% female, 14.1% groups, and 3.4% where gender was not stated. Animals were involved in 15.1% of the incidents. Table 3.13 and Table 3.14
- Of the 1403 human victims in incident calls, information about symptoms was given for 1,243. Of these, 58.0% were symptomatic (symptoms matched those for pesticide in question), 20.8% were asymptomatic, and 21.2% reported atypical symptoms. Table 3.15
- Amongst the 1,403 human victims, there were two deaths reported, but neither of incidents was judged to have a certainty index of 1 or 2, making it unlikely that the deaths were a result of pesticide exposure. Of the 310 animal victims, there were 36 deaths, with 19 of the incidents assigned a certainty index of 1 or 2, indicating likely pesticide involvement. Table 3.16
- Victim ages were available for 525 of the 1,403 human victims. Sixty percent of the victims were between the ages of 25 - 64, 8.9% over age 64, and 30.9% were between the ages of 24 to less than 1 year. Table 3.17
- Most of the calls (86.4%;15,357) to NPTN came from the general public, while 4.4% calls came from federal/state/local agencies, 2.5% from medical personnel, 2.4% from information providers, and 3.4% from consumer users. Table 3.4
- Most of the known locations (969) where incidents occurred were the home or yard (75.3%), while 9.5% were agriculturally related and 5.3% involved an office building or school. Table 3.11
- Most of the calls to NPTN (65.2%; 11,590) were answered by providing verbal information to the caller; other actions taken by pesticide specialists were to refer callers to EPA and SLA (9.9%), to County Extension Service (4.0%), Oregon Poison Center (0.4%), National Animal Poison Control Center (0.6%), Antimicrobial Complaint System (0.6%), and other organizations (11.3%). Some callers (8.1%) received information via mail or FAX. Table 3.7
- Most inquires to NPTN were via telephone (17,104) - AT&T phone logs indicated that many more calls were placed to the NPTN 800# than could be answered by the number of pesticide specialists on staff. Table 3.3
- The largest number of calls were received from Texas, California, and New York - states ranked 3, 1, 2, respectively, in terms of population. Table 3.8, Figure 3.1
- By EPA region, 12.7% of the calls came from Region 6, 11.6% from Region 4, 10.8% from Region 9, 10.5% from Region 3, and 9.3% from Region 2. Figure 3.2

National Pesticide Telecommunications Network 1995 Annual Report

Note: The complete record of the accomplishments of NPTN for the 1995 operational year include the 12 monthly reports and 4 quarterly reports (submitted earlier) , in addition to this "1995 Annual Report."

1. NPTN Mission Statement

The primary mission of the National Pesticide Telecommunications Network is to serve as a source of objective, science-based pesticide information on a wide variety of pesticide-related subjects, including:

- pesticide products
- recognition and management of pesticide poisonings
- toxicology
- environmental chemistry
- referrals for laboratory analyses, investigation of pesticide incidents, and emergency treatment
- safety practices
- health and environmental effects
- clean-up and disposal referrals.

A major goal of NPTN is to promote informed decision making on the part of the caller.

Service provided by NPTN is available from 6:30am - 4:30 pm Pacific Time, 5 days per week (excluding holidays), principally through a toll free telephone number available to anyone in the United States and its territories. NPTN is sponsored cooperatively by Oregon State University and the U.S. Environmental Protection Agency.

NPTN is open to questions from the public and professionals. It is staffed by highly qualified and trained pesticide specialists who have the toxicology and environmental chemistry training needed to provide knowledgeable answers to questions about pesticides. NPTN pesticide specialists deliver information in a user-friendly manner and are adept at communication scientific information to the lay public. Pesticide specialists can help callers interpret and understand toxicology and environmental chemistry information about pesticides. The service provided by NPTN and its associated projects are strictly informational and have no regulatory or enforcement capabilities.

1.1 Objectives

The stated objectives of NPTN are:

- 1) To operate a toll free telephone service to callers in the United States, Puerto Rico, and the Virgin Islands. A recording device is provided to capture off-hour calls.
- 2) To serve as a source of factual, unbiased information on pesticide chemistry, toxicology, and environmental fate to all who call including industry, government, medical, and agricultural personnel, as well as the general public.
- 3) To provide the medical community with diagnostic and crisis management assistance involving pesticide incidents in situations pertaining to both human and animal patients.
- 4) To acquire accurate and complete information on all calls considered to be pesticide incidents.
- 5) To computerize all call information as well as pesticide incident data for easy retrievability.

1.2 History

The pesticide information service began in 1978 with the Texas Tech University Health Sciences center associated Pesticide Hazard Assessment Project (PHAP) in San Benito, Texas. This service was originally used to report pesticide incidents in EPA Region VI through the Pesticide Incident Monitoring System (PIMS). Later, callers from across the U.S. began using the service to obtain information on pesticides. In 1980, the network was designated as the National Pesticide Information Clearinghouse (NPIC). In 1984, the NPIC added the 24 hour responsibilities of South Carolina's National Pesticide Telecommunications Network (NPTN) and changed its name to NPTN. The NPTN system remained in San Benito until April 1985 when it moved to the Department of Preventive Medicine and Community Health of the Texas Tech University Health Sciences Center in Lubbock, Texas. NPTN remained at Texas Tech through March, 1995. Following a competitive renewal process for the grant supporting the Cooperative Agreement between the U.S. Environmental Protection Agency and the co-sponsoring university, NPTN moved to Oregon State University on April 1, 1995.

1.3 Inquiries and Resources

NPTN receives inquiries from across the U.S. and from Puerto Rico, the Virgin Islands, Canada, Mexico, and numerous other countries. Most of the inquiries to NPTN are from the general public. The nature of the inquiries range from requests for information about: health implications of pesticide use; pesticide toxicology, environmental chemistry, regulations, and use practices; product information; environmental effects of pesticides; pesticide safety, protective equipment, cleanup and disposal; pesticide regulations; and current pesticide-related issues in the news.

NPTN maintains an extensive collection of hard-copy and electronic resources for pesticide information, used as necessary by the pesticide specialists in answering inquiries. Included in this

collection are: NPTN's AI file containing information on over 200 pesticide active ingredients; numerous compendia of pesticide information (e.g., Handbook of Pesticide Toxicology, Code of Federal Regulations - 40 CFR Parts 150 - 189, Pest Control Operations, Toxicology - The Science of Poisons, Farm Chemicals Handbook, WHO Environmental Health Criteria series, Herbicide Handbook, The Pesticide Manual, Common-Sense Pest Control, pesticide product labels - to name but a few); electronic access to EXTTOXNET (EXtension TOXicology NETwork), CHEMBANK (HSDB, RTECS, IRIS), and PESTBANK; and on-line literature searching (e.g., Medline, Toxline).

1.4 Associated Projects

In addition to its basic service described above, NPTN administers two related sub-projects - EIIS (Ecological Incident Information System) and ACS (Antimicrobial Complaint System). ACS provides information (via its own toll free line) to medical professionals and the public on disinfectants, sanitizers, and sterilants, each classified as pesticides by the U.S. EPA. EIIS provides information to U.S. EPA on pesticide incidents involving wildlife.

1.5 Funding

Funding for NPTN, EIIS, and ACS is provided principally by the U.S. Environmental Protection Agency, with substantial support being provided by Oregon State University in the form of cost sharing, salary support, and facilities.

2. Update

2.1 Personnel Update

NPTN began operations at OSU on April 3, 1995. At that time, staffing was from existing Department of Agricultural Chemistry personnel. Three full time and two part time Faculty Research Assistants were later hired as Pesticide Specialists.

2.2 Call Update

NPTN responded to 17,775 inquiries, 1944 of which were classified as incidents. Incident calls were reviewed by Dr. Sheldon Wagner and/or the Operations Manager. A pesticide spill, a misapplication, a contamination of a non-target entity, or any purported exposure to a pesticide (regardless of injury) is classified as an incident (regardless of certainty index). The certainty index is an estimate by NPTN as to whether the incident was either definitely (1), probably (2), possibly (3), or unlikely (4) to have been caused by exposure to a pesticide, or whether the incident was unrelated (5) to pesticides. A certainty index of 0 reflects those calls where the caller reported being exposed to a pesticide but no symptoms were present. Incidents with a certainty index of 1 or 2 are listed in NPTN's monthly reports.

2.3 Achievements

NPTN purchased and installed a UNIX Solaris 2.4 operating system. This system will be the web server for the NPTN World Wide Web site. NPTN has acquired numerous new resources. In addition, NPTN specialists attended seminars and training sessions such as:

- Seminar on exposure assessment and pesticides in indoor air;
- Seminar on cholinesterase testing—variations in tests and interpretation of results; and
- Special session on structural pest control at a pesticide applicator short course.

3. Traffic Report

3.1 Traffic Report Narrative

NPTN answered 17,775 inquiries during its first year of operation (April 1995 - March 1996) at Oregon State University. A monthly summary of calls is provided in Table 3.1. Also included in Table 3.1 is a listing of the total number of calls for the 1995 calendar year. The types of calls received by NPTN are shown in Table 3.2.

The means by which people contact NPTN is shown in Table 3.3. The telephone is by far the most important contact route. The variety of callers to NPTN is shown in Table 3.4. The predominant number of calls received by NPTN are from the general public. The types of questions posed to the NPTN Pesticide Specialists are sorted in Table 3.5. Most of the callers requested information about health related issues. Most of these information calls and the others listed in Table 3.5 were prompted by concern/knowledge of the caller (Table 3.6). The reasons for incident calls are also shown in Table 3.6. The outcome of most calls to NPTN is that the caller receives verbal information from a Pesticide Specialist (Table 3.7). A large number of callers receive written information as well as verbal information. In addition, many calls are forwarded onto either EPA, NPMMP (National Pesticide Medical Monitoring Program), or a state lead agency (such as the Department of Agriculture).

The callers to NPTN represent all 50 states as well as Canada and other foreign nations. Table 3.8 show the number of calls from each of the states, Puerto Rico, the Virgin Islands, and other locations. The 10 states from which most of the calls are from is presented in Figure 3.1. Residents from Texas, California, and New York initiate the greatest number of calls. Also shown in Table 3.8 and presented graphically in Figure 3.2 are the number of calls from each of the EPA regions.

Questions or comments about chlorpyrifos generate a greater number of calls to NPTN than any other pesticide active ingredient. The total number of calls as well as the number of information and incident calls for the 25 most asked about pesticide active ingredients is presented in Table 3.9. For incident calls, the value shown in parentheses indicates the number of incidents with a certainty index of 1 (definite) or 2 (probable). The 10 active ingredients mentioned most often in calls is graphically represented in Figure 3.3. The 25 active ingredients most frequently mentioned in incident calls are listed in Table 3.10. Incident calls are further represented by victim type. The 10 active ingredients most often mentioned in incident calls are graphically represented in Figure 3.4.

The locations where pesticide exposures were purported to have taken place are shown in Table 3.11. The environmental impact of the pesticides involved in incidents is shown in Table 3.12.

The incident calls are further categorized by whether the incident involved a human, animal, or building/other. Incidents are further classified in Table 3.13. The incident calls for each victim type are categorized by the certainty index. The certainty index is an estimate by NPTN as to whether the incident was either definitely (1), probably (2), possibly (3), or unlikely (4) to have been caused by exposure to a pesticide, or whether the incident was unrelated (5) to pesticides. A certainty index of 0 reflects those calls where the caller reported being exposed to a pesticide but no symptoms were present. For human victims presented in Table 3.13, the certainty index is further categorized by gender or group.

Table 3.14 lists the descriptions for the victims involved in incidents in the 1995 NPTN operational year. Reported symptoms are shown in Table 3.15. The number of deaths, life threatening, or interesting/strange cases due to a potential pesticide exposure is shown in Table 3.16. Victim ages are provided in Table 3.17.

3.2 Traffic Report Tables and Figures

Table 3.1 NPTN Monthly Telephone Calls

Month	Number of Calls				
	1995	1996	1997	1998	1999
April	1560				
May	1494				
June	1612				
July	1763				
August	2004				
September	1633				
October	1699				
November	1289				
December	895				
January	1098				
February	1217				
March	1511				
Calendar ¹ Year Total =	13,949				
Grant ² Year Total =	17,775				

¹April 1 through December 31 for 1995; January 1 through December 31, other years.

²April 1 through March 31.

Table 3.2 Summary of Types of Calls Received by NPTN

Type of Call	Number of Calls				
	1995	1996	1997	1998	1999
Information - Specific Pesticide	7215				
Information - General Pesticide	7973				
Incidents	1944				
Human Victims	1327				
Animal Victims	276				
Building/Other	331				
Other - Non-Pesticide	643				
Grant Year Total =	17,775				

Table 3.3 Means to Contact NPTN

Origin of Call	Number of Calls				
	1995	1996	1997	1998	1999
Telephone	17,104				
Voice Mail	373				
Mail	117				
Walk In	7				
Other	174				
Grant Year Total =	17,775				

Table 3.4 Type of Caller to NPTN

Type of Caller	Number of Calls				
	1995	1996	1997	1998	1999
General Public	15,357				
Federal/State/Local Agency					
Health Agency	122				
Government Agency	360				
Enforcement Agency	39				
Schools/Libraries	239				
Fire Department	27				
Medical Personnel					
Human Medical	336				
Animal Vet./Clinic	92				
Migrant Clinic	9				
Information Groups					
Media	127				
Unions/Info. Service	51				
Environmental Org.	119				
Pesticide Mfg./Mktg. Co.	128				
Consumer Users					
Lawyer/Insurance	98				
Lab./Consulting	222				
Pest Control	186				
Retail Store	55				
Farm	51				
Other	157				
Grant Year Total =	17,775				

Table 3.5 Types of Questions Asked by Callers to NPTN

Type of Question	Number of Calls				
	1995	1996	1997	1998	1999
Health Related					
Health	8225				
Treatment	172				
Testing Lab.	73				
Usage Information					
Pest/Crop	1211				
Chemical	912				
Pros and Cons	162				
Safety/Application	278				
Cleanup	273				
Harvest Intervals	143				
Lawn Care	58				
Compliance					
Regulations	1107				
Complaints	223				
Disposal	210				
General	1519				
NPTN Questions	973				
Non-Pesticide Related	460				
Other	1776				
Grant Year Total =	17,775				

Table 3.6 Reason for Inquiry to NPTN

Reason for Inquiry	Number of Calls				
	1995	1996	1997	1998	1999
Information Calls					
Concern/Knowledge	15,019				
Incident Calls					
Exposures					
Dermal - Acute	249				
Dermal - Chronic	34				
Ingestion - Acute	160				
Ingestion - Chronic	7				
Inhalation - Acute	244				
Inhalation - Chronic	45				
Exposure Possible	445				
Exposure/Unknown/Many	72				
Occupational	79				
Accidents					
Misapplic. - Homeowner	152				
Misapplic. - PCO	132				
Misapplic. - Other	31				
Spill - Indoor	65				
Spill - Outdoor	24				
Contamination - Home	37				
Contamination - Other	36				
Drift	81				
Fire - Home	3				
Fire - Other	3				
Industrial Accident	0				
Odor Only	53				
Testing Laboratory	6				
Other	103				
N/A-Unknown	695				
Grant Year Total =	17,775				

Table 3.7 Action Taken by NPTN

Action Taken	Number of Calls				
	1995	1996	1997	1998	1999
Verbal Information	11,590				
Referrals to:					
EPA, State Lead Agencies, National Pesticide Medical Monitoring Program	1763				
County Extension	711				
Oregon Poison Center	69				
National Animal Poison Control Center	100				
Antimicrobial Complaint System	103				
Other Organizations	2001				
Mailed Information, Brochure, Publication	1098				
Other/FAXED Information	340				
Grant Year Total =	17,775				

Table 3.8 Listing of States and Foreign Nations Using NPTN During 1995 Operational Year

EPA Region	State Code	State	Number of Calls
		Not recorded	3279
10	AK	Alaska	13
4	AL	Alabama	142
6	AR	Arkansas	91
9	AZ	Arizona	137
9	CA	California	1668
FN	CN	Canada	75
8	CO	Colorado	262
1	CT	Connecticut	404
3	DC	District of Columbia	161
3	DE	Delaware	27
4	FL	Florida	907
FN	FN	Foreign	6
4	GA	Georgia	254
9	HI	Hawaii	63
7	IA	Iowa	74
10	ID	Idaho	38
5	IL	Illinois	358
5	IN	Indiana	169
7	KS	Kansas	117
4	KY	Kentucky	141
6	LA	Louisiana	125
1	MA	Massachusetts	722
3	MD	Maryland	431
1	ME	Maine	45
5	MI	Michigan	229
5	MN	Minnesota	187
7	MO	Missouri	246
4	MS	Mississippi	45
8	MT	Montana	43
4	NC	North Carolina	299

Table 3.8 Listing of States and Foreign Nations Using NPTN During 1995 Operational Year (continued) -

EPA Region	State Code	State	Number of Calls
8	ND	North Dakota	24
7	NE	Nebraska	83
1	NH	New Hampshire	77
2	NJ	New Jersey	271
6	NM	New Mexico	68
9	NV	Nevada	45
2	NY	New York	1362
5	OH	Ohio	411
6	OK	Oklahoma	107
10	OR	Oregon	619
3	PA	Pennsylvania	781
2	PR	Puerto Rico	4
1	RI	Rhode Island	27
4	SC	South Carolina	105
8	SD	South Dakota	15
4	TN	Tennessee	156
6	TX	Texas	1852
FN	UN	Unknown	6
8	UT	Utah	39
3	VA	Virginia	380
2	VI	Virgin Islands	3
1	VT	Vermont	27
10	WA	Washington	323
5	WI	Wisconsin	139
3	WV	West Virginia	80
8	WY	Wyoming	13
Grant Year Total =			17,775

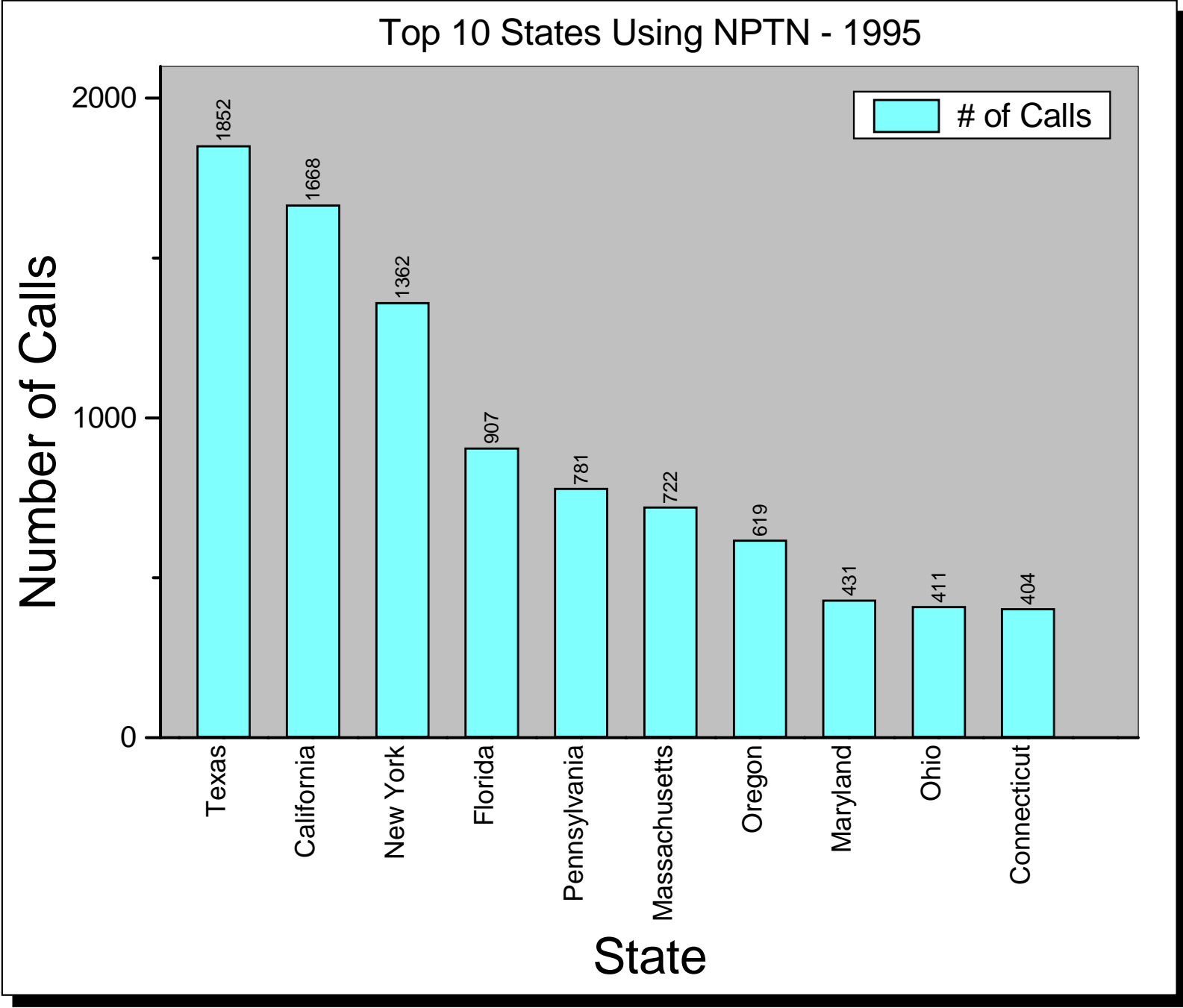


Figure 3.1 Top 10 States Using NPTN

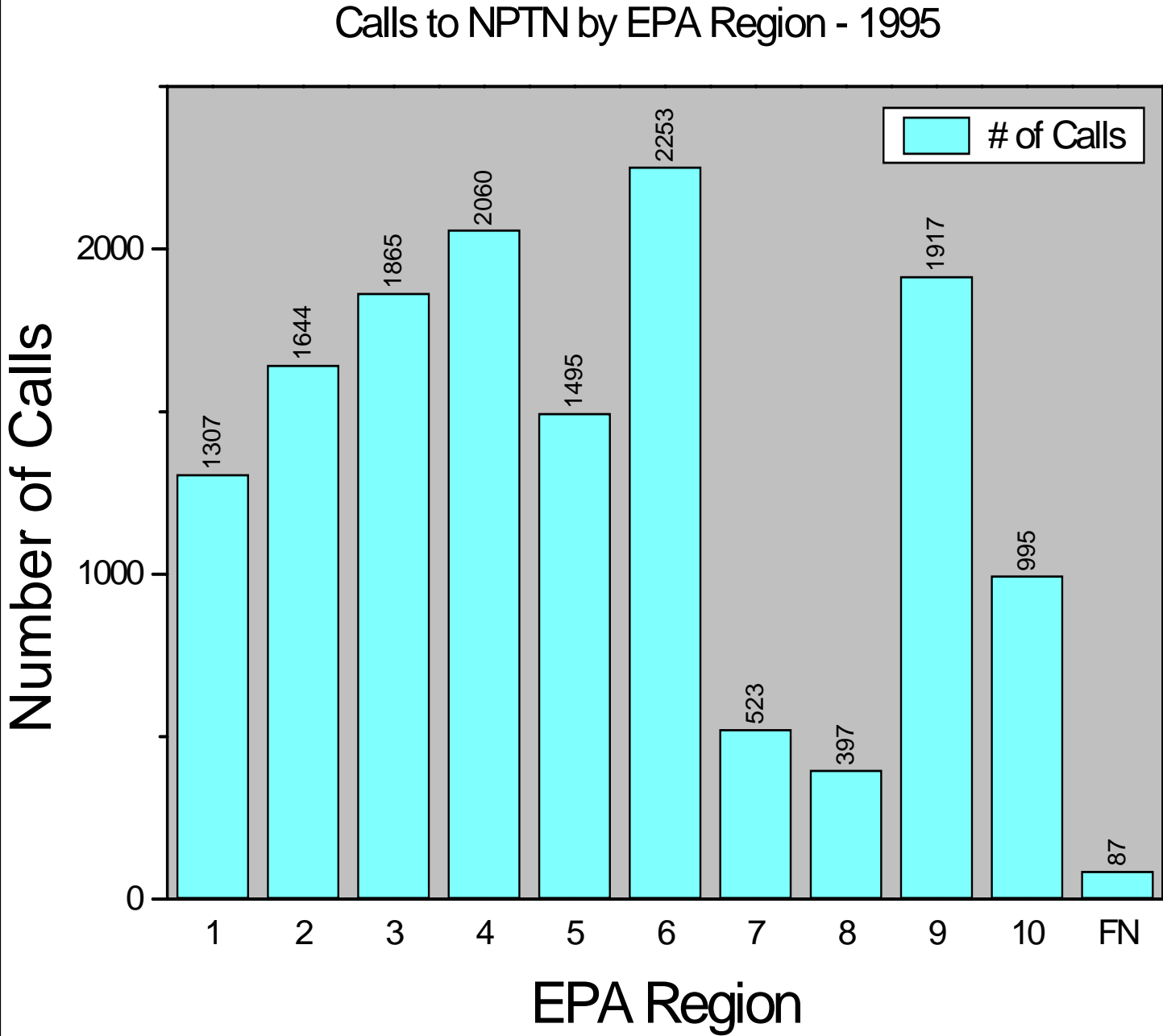


Figure 3.2 Calls to NPTN by EPA Region

Table 3.9 Top 25 Active Ingredients for All Calls to NPTN in the 1995 Operational Year

Active Ingredient	Total Calls	Incident Calls¹⁾	Information Calls
Chlorpyrifos	1852	370 (75)	1485
Diazinon	688	187 (39)	502
Permethrin	650	79 (18)	571
Pyrethrins	476	80 (17)	398
Bendiocarb	439	35 (13)	405
Boric acid	397	20 (3)	380
Cyfluthrin	374	43 (8)	332
Cypermethrin	359	45 (8)	314
Chlordane	280	43 (9)	237
Carbaryl	270	47 (4)	223
Malathion	258	79 (14)	178
Glyphosate	254	54 (5)	200
2,4-D	195	37 (4)	159
Sulfuryl fluoride	169	11 (3)	158
Acephate	151	36 (7)	115
Propetamphos	144	20 (2)	124
Methoprene	133	9 (1)	124
DDT	118	14 (3)	104
DEET	116	20 (10)	96
Pyrethrin	104	15 (4)	89
Hydramethylnon	91	17 (1)	74
Lindane	89	22 (4)	67
Fenvalerate	86	12 (5)	74
Propoxur	85	21 (4)	65
Fenoxycarb	71	6 (4)	66
Total - Above Pesticides =	7849	1322 (265)	6540
All Other Pesticides =	1334	622	694

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Top 10 Active Ingredients in Calls to NPTN - 1995

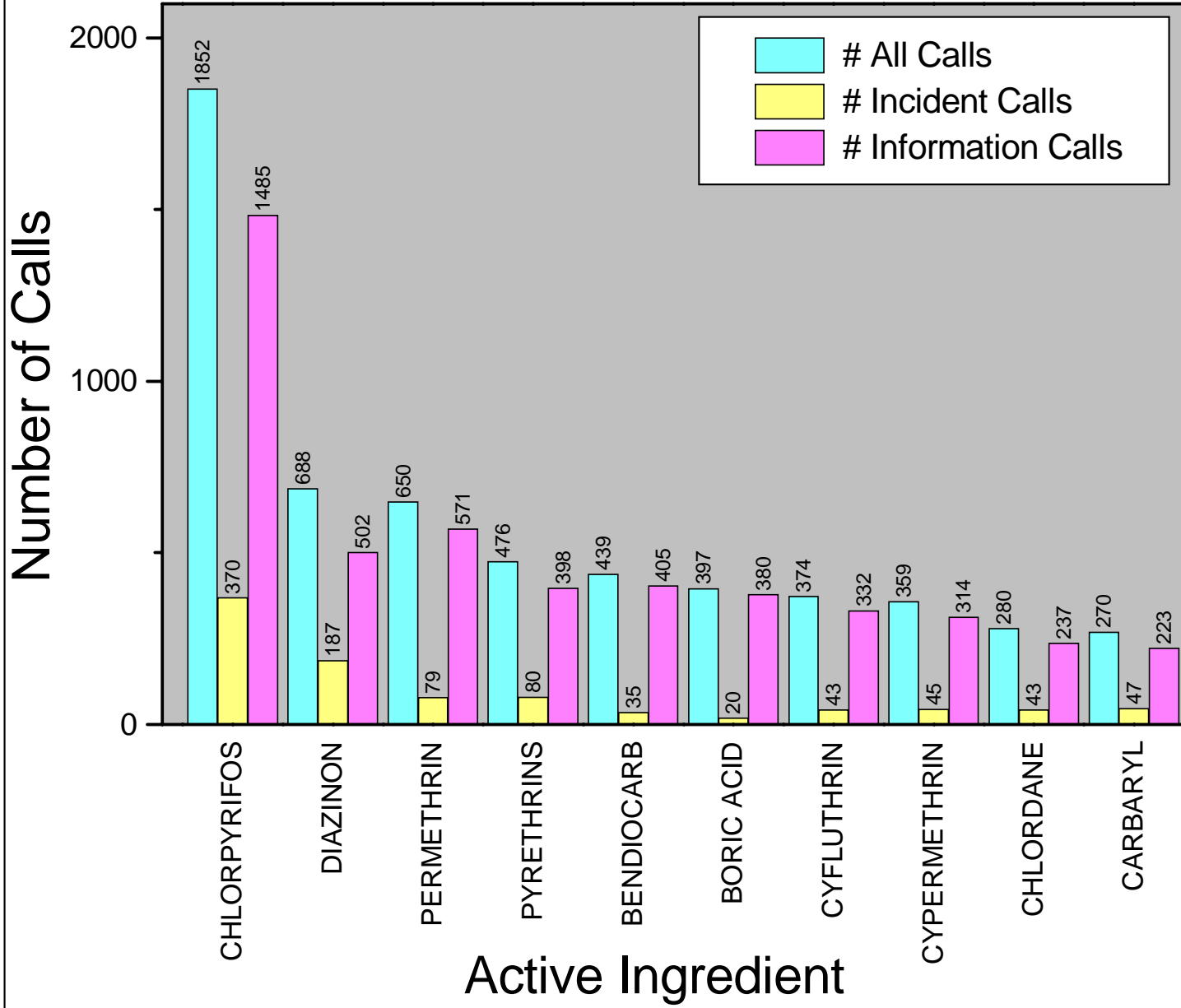


Figure 3.3 Top 10 Active Ingredients in All Calls

Table 3.10 Top 25 Active Ingredients for Incident Calls in the 1995 Operational Year

Active Ingredient	Total Incidents¹⁾	Human Incidents	Animal Incidents	Other Incidents	Information Calls
Chlorpyrifos	370 (75)	282 (67)	34 (5)	54 (3)	1485
Diazinon	187 (39)	120 (28)	25 (6)	42 (5)	502
Malathion	79 (14)	58 (11)	4 (1)	17 (2)	178
Pyrethrins	80 (17)	63 (13)	10 (4)	7 (0)	398
Permethrin	79 (18)	59 (14)	11 (3)	9 (1)	571
Glyphosate	54 (5)	37 (5)	10 (0)	7 (0)	200
Carbaryl	47 (4)	31 (3)	4 (1)	12 (0)	223
Cypermethrin	45 (8)	36 (7)	4 (1)	5 (0)	314
Cyfluthrin	43 (8)	37 (6)	3 (2)	3 (0)	332
Chlordane	43 (9)	29 (6)	1 (0)	13 (3)	237
2,4-D	37 (4)	26 (4)	2 (0)	9 (0)	159
Acephate	36 (7)	22 (4)	5 (2)	9 (1)	115
Bendiocarb	35 (13)	18 (8)	11 (5)	6 (0)	405
Lindane	22 (4)	13 (1)	3 (2)	6 (1)	67
Propoxur	21 (4)	19 (4)	0 (0)	2 (0)	65
Boric acid	20 (3)	14 (2)	2 (0)	4 (1)	380
DEET	20 (10)	16 (9)	0 (0)	4 (1)	96
Propetamphos	20 (2)	18 (1)	1 (1)	1 (0)	124
Hydramethylnon	17 (1)	7 (0)	10 (1)	0 (0)	74
Pyrethrin	15 (4)	13 (3)	1 (1)	1 (0)	89
Bromadiolone	14 (5)	4 (1)	10 (4)	0 (0)	23
DDT	14 (3)	11 (2)	0 (0)	3 (1)	104
Diquat dibromide	12 (2)	7 (1)	3 (0)	2 (1)	16
Fenvalerate	12 (5)	6 (2)	4 (3)	2 (0)	74
Lambdacyhalothrin	12 (2)	11 (2)	1 (0)	0 (0)	31
Total - Above Pesticides =	1334 (266)	957 (204)	159 (42)	218 (20)	6262
All Other Pesticides =	610	370	117	113	972

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

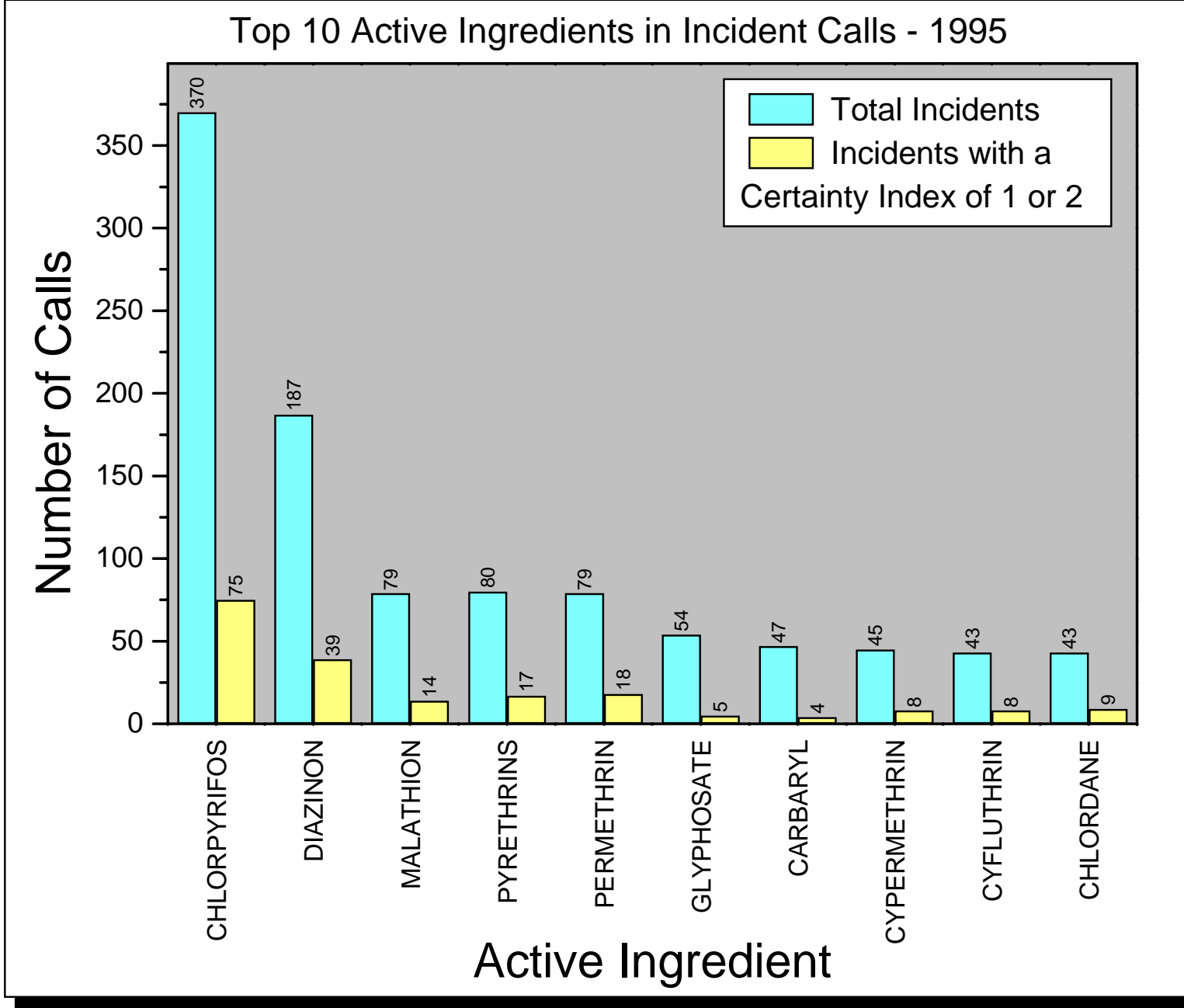


Figure 3.4 Top 10 Active Ingredients in Incident Calls

Table 3.11 Location Where Potential Exposure to a Pesticide Occurred

Location	Number of Incident ¹⁾ Calls				
	1995	1996	1997	1998	1999
Unclear/Unknown	975 (139)				
Home or Yard	730 (152)				
Agriculturally Related	92 (19)				
Industrially Related	10 (2)				
Office Building, School	51 (9)				
Pond, Lake, Stream Related	8 (3)				
Nursery, Greenhouse	7 (1)				
Food Service/Restaurants	6 (3)				
Retail Store/Business	4 (2)				
Roadside/Right-of-Way	10 (1)				
Park/Golf Course	8 (0)				
Other	43 (16)				
Total =	1944 (347)				

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Table 3.12 Reported Environmental Impact from Pesticide Incidents Reported

Environmental Impact	Number of Incident ¹⁾ Calls				
	1995	1996	1997	1998	1999
Air	29 (6)				
Water	24 (5)				
Soil	17 (2)				
Food Crops/Process	68 (4)				
Property	105 (24)				
Poultry/Livestock	11 (2)				
Plants/Trees	31 (1)				
Not Applicable	1647 (297)				
Other	11 (6)				
Total =	1943 (347)				

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Table 3.13 Incident Calls Sorted by Certainty Index for the 1995 Operational Year

CI for All Categories of Victims					Breakdown of Human Victim Incident Calls			
Certainty Index	Humans	Animals	Other	Total	Male	Female	Groups	Gender Not Stated
Total Calls in Operational Year = 17,775								
Non-Incident Calls = 16,386								
Information Only (0)	235	49	284	568	61	119	46	9
Definite (1)	26	22	9	57	13	6	6	1
Probable (2)	254	63	16	333	91	112	47	4
Possible (3)	572	104	25	701	198	279	75	20
Unlikely (4)	298	63	6	367	94	169	22	13
Unrelated (5)	18	8	2	28	5	10	2	1
Total =	1403	309	342	2054	462	695	198	48

Table 3.14 Description of Victims Involved in Reported Incidents

Description of Victims	Number of Victims				
	1995	1996	1997	1998	1999
All females -					
Female	625 (112)				
Female-pregnant	68 (5)				
Female suicide attempt	2 (1)				
Total all females =	695 (118)				
All males -					
Male	460 (103)				
Male suicide attempt	2 (1)				
Total all males =	462 (104)				
All groups -					
Family	144 (40)				
Non-family group	54 (13)				
Total all groups =	198 (53)				
Gender not stated -					
Child - sex unknown	33 (4)				
Adult - sex unknown	0 (0)				
Other - sex unknown	15 (1)				
Total gender not stated =	48 (5)				
Total all humans =	1403 (280)				
All animals -					
Single animal	242 (66)				
Group of animals	50 (15)				
Wildlife	18 (4)				
Total all animals =	310 (85)				
Other victims:					
Building-home/office	134 (16)				
Other places	208 (9)				
Total other victims =	342 (25)				
Total all victims =	2055 (390)				

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Table 3.15 Reported Symptoms of Victims Involved in Incident Calls

Reported Symptoms	Number of Victims ¹⁾				
	1995	1996	1997	1998	1999
Human symptoms -					
Symptomatic	721 (263)				
Asymptomatic	258 (48)				
Atypical	264 (22)				
Total humans =	1243 (333)				
Animal symptoms -					
Symptomatic	152 (81)				
Asymptomatic	77 (10)				
Atypical	53 (6)				
Total animals =	282 (97)				
Total symptoms =	1525 (430)				

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Table 3.16 Additional Outcomes for Victims Involved in Incident

Additional Outcome	Number of Victims ¹⁾				
	1995	1996	1997	1998	1999
Human deaths -					
Male	2 (0)				
Female	0 (0)				
Total human deaths =	2 (0)				
Animal deaths -					
Single animal	19 (10)				
Group of animals	12 (7)				
Wildlife	5 (2)				
Total animal deaths =	36 (19)				
Other -					
Life threatening	11 (7)				
Interesting/strange	42 (17)				
Total other =	53 (24)				
Total additional outcomes =	91 (43)				

¹⁾ First number represents the total of purported incidents regardless of certainty index - numbers in parentheses indicate the total of incidents with certainty index of 1 (definite) or 2 (probable).

Table 3.17 Reported Ages of Human Victims Involved in Incident

Age Category	Number of Victims				
	1995	1996	1997	1998	1999
Under 1 Year	27				
1 Year	19				
2 Years	23				
3 Years	11				
4 Years	9				
5 - 9 Years	20				
10 - 14 Years	21				
15 - 24 Years	32				
25 - 44 Years	201				
45 - 64 Years	115				
Over 64 Years	47				

4. Report on Subcontracts

4.1 Oregon Poison Center

NPTN pesticide Specialists transferred 64 calls to the Oregon Poison Center. These calls were transferred to the center because the specialists deemed that the caller's situation represented an acute poisoning emergency. The NPTN Quarterly Reports presents a table for the calls transferred in that quarter.

4.2 National Animal Poison Control Center

In the current year, 102 calls were transferred to the National Animal Poison Control Center (NAPCC). The situation presented in each call was considered to be an emergency therefore the call was transferred to NAPCC.

5. Sub-Projects

5.1 Antimicrobial Complaint System (ACS)

In the third quarter of the 1995 NPTN Operational year, we received a signed contract and award money to operate the Antimicrobial Complaint System (EPA contact: Wallace Powell, Registration Division - Office of Pesticide Programs). At that time we initiated the hiring process for a Faculty Research Assistant to serve as the Antimicrobial Specialist. At the end of the fourth quarter, a specialist was hired with a start date of April, 1996.

5.2 Ecological Incident Information System (EIIS)

The official award notice was received in the third quarter of this operating year. In January, 1996, discussions began between NPTN and Candace Brassard (Environmental Fate and Effects Division - Office of Pesticide Programs) to outline the scope of work for operating EIIS at OSU.

