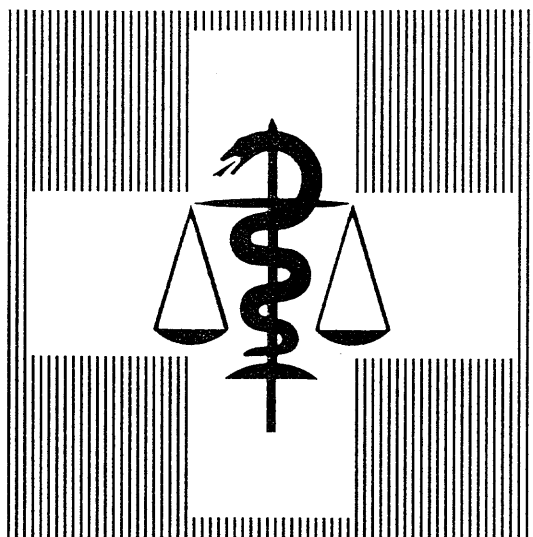


**Schweizerisches Toxikologisches Informationszentrum  
Centro Svizzero d'Informazione Tossicologica  
Centre Suisse d'Information Toxicologique  
Swiss Toxicological Information Centre**

**Annual Report 1997**



Emergency calls

++ 41 1251 51 51

Other calls

++ 41 1251 66 66

Fax

++ 41 1252 88 33

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**Support**

The Swiss Toxicological Information Centre (STIC) is supported by a private foundation for public benefit, as well as by the Swiss Cantons. The traditional supporting organizations are:

- The Swiss Society of Pharmacists
- The Swiss Society of Chemical Industries
- The Swiss Federation of Physicians.

Additional substantial aid comes from

- The Swiss National Accident Insurance Fund
- The Swiss Association of Private Health and Accident Insurances
- The Association of the Swiss Health Insurances Companies.

Important donations and contributions come from private companies and individuals (p. 40).

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**Advisors**

Numerous specialists, mainly from hospitals, institutes and state as well as federal offices act as honorary advisors.

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## Dear Reader

The existence of Poisons Centres is connected closely to the need of a quick decision about what should be done, or not be done, when a drug, a household or industrial product, or a natural toxin has been taken or applied improperly.

Every case and situation has its unique features. An adequate response by the Poisons Centre in all cases requires a professional set-up in its own right, as well as a large, well maintained and specifically oriented documentation.

A good feed-back of follow-up information about practical experience in humans and animals is needed for progress in risk assessment and therapeutic advice.

It is not surprising that in a period of shortened resources, smaller Poisons Centres with already limited or insufficient manpower and functionalities are disappearing. The population, in such cases, is badly served, and the costs of handling potential poisoning rise.

It is therefore important that the main actors in this field join their forces on the international level, in order to define common rules and procedures that will guarantee efficient services at the lowest possible price. It is important that problems and tasks common to all centres are solved collectively.

One step in this direction is the 18th International Congress of Poisons Centres and Clinical Toxicologists (EAPCCT, Zurich, March 1998).

Another step is our contribution to the european harmonization of reporting. The new statistics include an additional degree of severity ("moderate"). For next year, we are preparing a new product classification based on WHO and EAPCCT proposals. Furthermore, we plan the introduction of a new causality assessment system derived from a model used in the domain of adverse drug reactions.

I hope that our initiative will have positive, longterm effects, and I invite all readers of this report to communicate their ideas about the improvement of our services.

Finally, let me thank to all the organisations and individuals who are supporting the Swiss Toxicological Information Centre, which would not exist without them.

Dr. Franz Merki  
President of the Foundation Council

# Report

## 1 Information service

29'506 calls were answered in 1997 (previous year: 29'496, p. 9). This represents, for the fourth consecutive year, a stabilisation, following a continued rise of calls in earlier years. The consultations on the phone included 5'897 (20%) information requests without exposure and 23'609 (80%) cases with exposure to a chemical agent. Among the latter, 6'180 (21%) cases were assessed as harmless. A potentially toxic risk for the patients was present in 17'429 (59%) inquiries.

### 1.1 Well documented inquiries

Detailed consultation reports were created by our physicians in 17'429 inquiries with a toxic potential (previous year: 16'546). These calls originated from all regions of the country, with a slight predominance of our home canton Zurich (pp. 10-11). 54% of these calls came from the general public and 39% from hospital physicians and practitioners.

The inquiries with potential intoxications concerned 16'281 humans and 956 animals (p. 12). The total number of information requests exceeds the number of patients involved, since the centre receives sometimes several calls for the same case. A more detailed analysis of these cases, including patient characteristics, agents, circumstances and severity is given on pp. 12-30. Children were involved in 48% of the cases, adults in 52% (fig. 1). The children were mainly preschoolers (83%). Among the adults women were more represented than men (p. 12).

Among the products involved, drugs continued to be the most important substances (40%, fig. 2 and pp. 25-28). The majority of severe cases (72%, p. 13) was also related to drugs (mainly drug combinations). The most frequent severe intoxications from single drugs were due to psychopharmaceuticals and hypnotics .

Household products and pesticides were second in frequency (30,2%, pp. 19-24). They were mostly ingested by accident and generated a relatively modest number of severe cases (1.3%, p. 13). The third group, technical and occupational products (pp. 18-19), had a significantly higher rate of severe cases (3.7%, p. 13). Poisoning by plants (pp. 14-15), while mostly benign, is on the rise (6.3% in 1994, 7.4% in 1995, 8.5% in 1996, 9.1% in 1997).

Accidental poisoning was still the predominant situation (p. 29 and fig. 3). Intentional poisoning, after a rise in 1996, decreased again from 23.4% to 21.1%.

The outcome (p. 30 and fig. 4) was evaluated on the basis of written reports received from treating physicians (3'939, previous year: 3'930). The proportion of fatal cases has been relatively stable in the recent past (1994: 0.4%, 1995: 0.5%, 1996: 0.3%, 1997: 0.3%).

Fatal poisoning is rare in our statistics. One of the main reasons for this is that our centre is seldom called when a victim is found dead.

Fig. 1

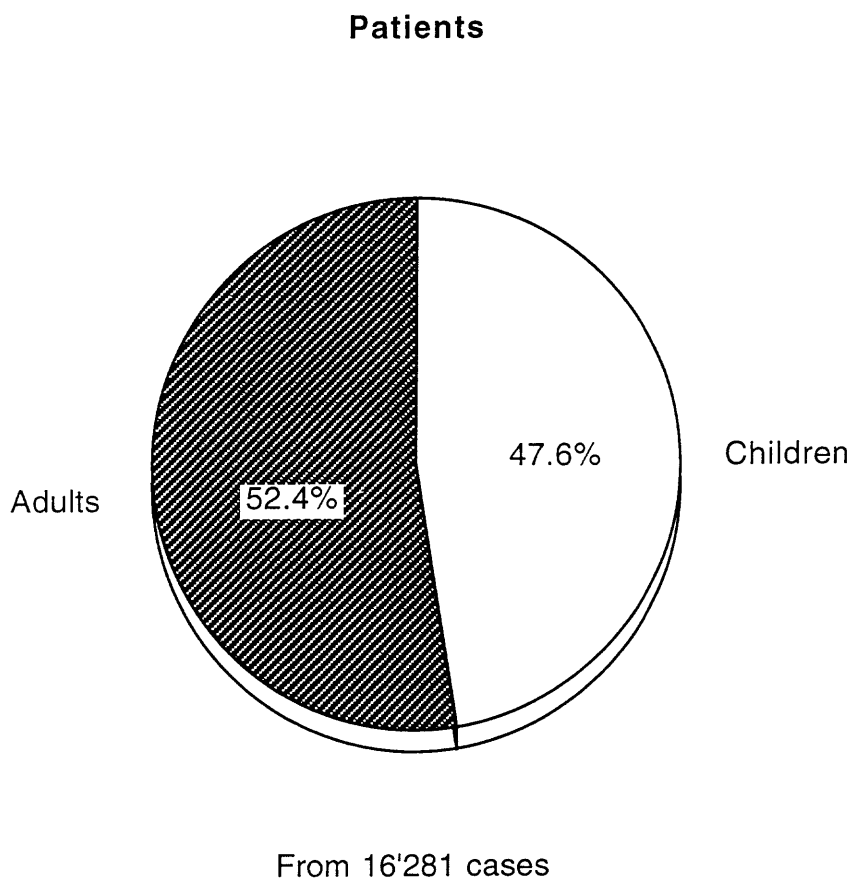
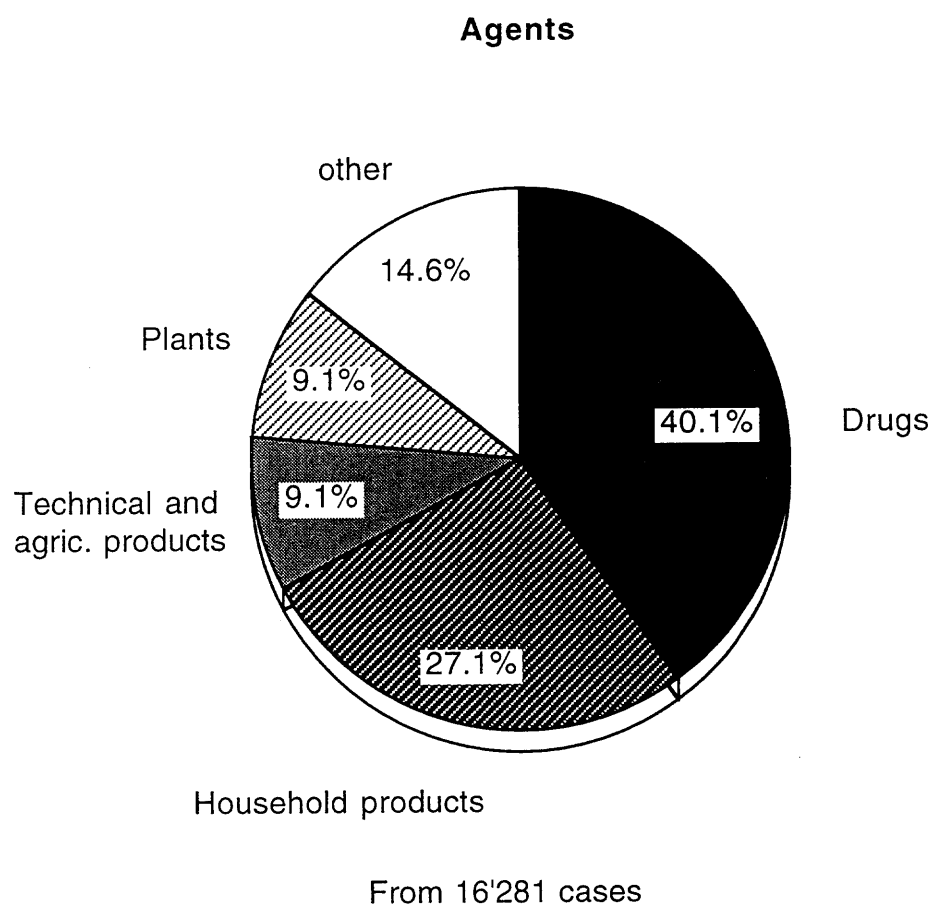


Fig. 2



## 1.2 Briefly registered inquiries

6'180 cases were considered as non-toxic exposures (previous year: 6'812). Children were involved in 78%, adults in 22%. Substances involved included household products (35%), drugs (25%), plants (18%) and food (10%). These calls came mostly from the public (83%). This shows that a Poisons Centre is very often in a position to prevent unnecessary hospitalisations.

5'879 calls were not related to any exposure (previous year: 6'138). They came from the public in 72% and from physicians and other professionals in 28% of the cases. They were related to:

- General informations about drugs (formula, indications, contra-indications, interactions, adverse effects, toxicity, dependence potential: 19%); household products (13%); plants and mushrooms (15%); food products (6%); other agents (12%).
- Environmental toxicology (gases, vapours, smoke, and dust indoors and outdoors, disposal of chemicals, water contamination, risks from chemical treatment of products: 14%).
- Documentation (publications, leaflets, individual reports, slides and other educational assistance: 8%).
- Various (antidotes, analytical facilities, abuse problems, toxic risks in pregnancy and lactation, decontamination and first aid, tablet identification, reglementation, prevention: 5%).
- Questions not related to toxicology, mostly redirected to other institutions: 8%.

## 2 Other services

### 2.1 Traditional services

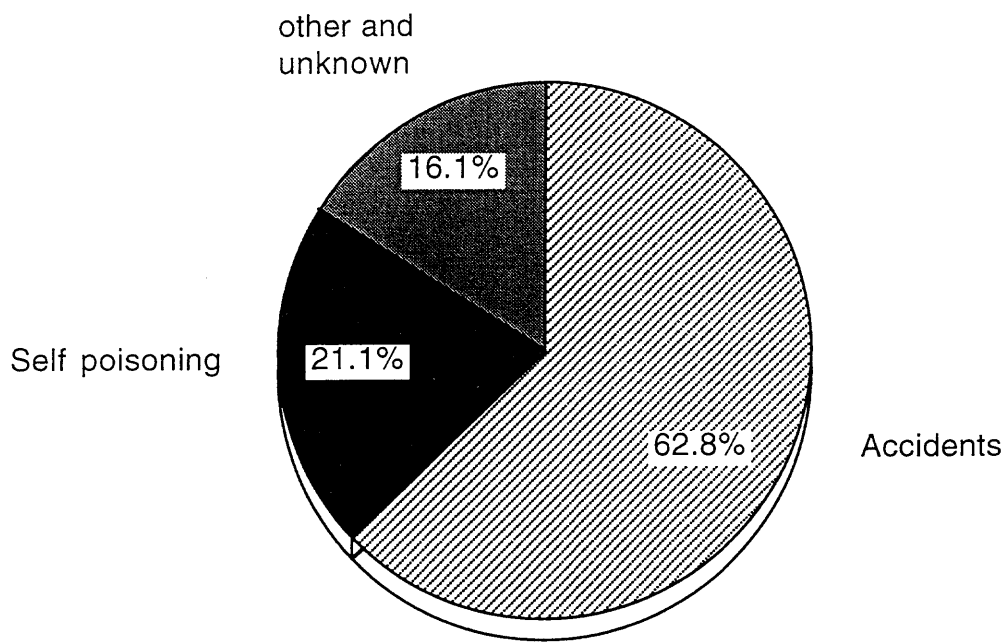
After having consulted our centre, physicians received 6'514 written reports. In particularly complex and urgent cases, protocols or literature excerpts were sent by fax, or there was an additional consultation with one of our senior toxicologists.

Written information requests were answered partly in writing, partly by phone (reviews of the experience with particular substances, mainly for industry, authorities and other professional bodies). In addition, 6'500 leaflets on first aid and poison prevention were sent on demand to health care groups and individuals.

Severe cases of poisoning with products registered under the Swiss Poison Law were communicated - in anonymized form - to the Federal Health Office, as well as to the interested manufacturers. Severe cases due to poisoning with drugs were also communicated in the same way to the respective manufacturers.

Fig. 3

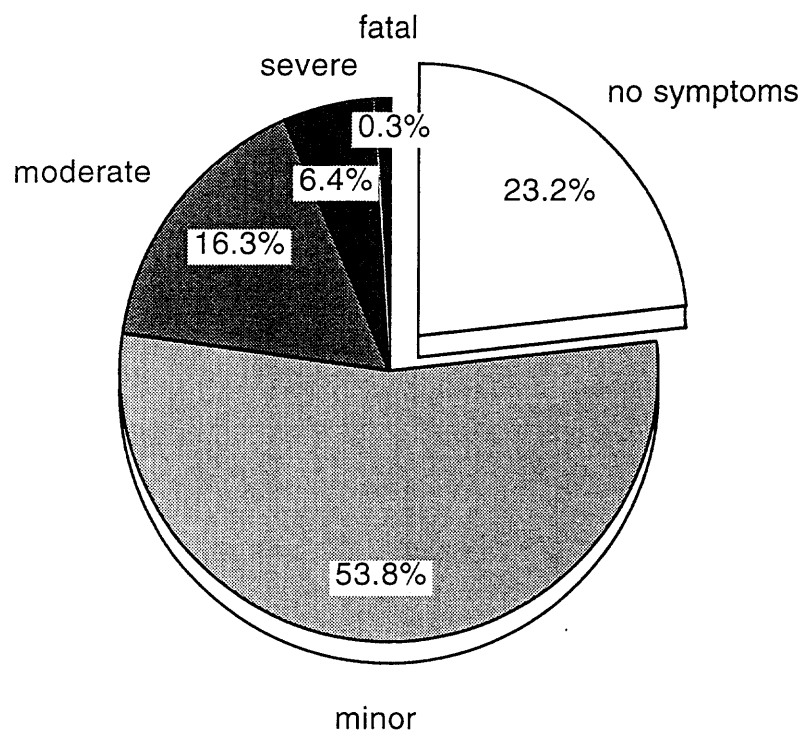
### Situations



From 16'281 cases

Fig. 4

### Evolution



From 3'939 cases with detailed medical reports



The internal synthesis of collected human experience led to the determination of critical doses for a number of frequent drug overdoses.

41 lectures were held for different societies including physicians, students and health care groups.

The publications are listed on pp. 31-33. Among them are four larger analyses of cases reported to the centre (corrosive agents, pediatric poisoning, carbon monoxide, adverse drug reactions).

## 2.2 New services

**Toxi**, the in-house information system introduced in May 1996, was completed starting with January 1st, 1997. All medical case reports have since been incorporated into the system in an anonymised and strictly structured form. They represent an additional tool for tailor-made poisons information.

**Toxi**, however, is not designed to replace the personal dialogue with physicians and patients. The dialogue will remain essential for optimal handling of the situation whenever a potentially toxic exposure has occurred. On the other hand, **Toxi** will enable the centre to generate more information spin-offs for general use.

The most recent news from our centre can be found on the Internet ([www.toxi.ch](http://www.toxi.ch)). This site features the announcement of publications, congress reports and coming events, practical information on how to proceed in case of emergency, and actual statements and warnings.

## 3 Special findings

Accidental severe poisoning in children with petroleum products, which had raised concerns since 1991, have practically disappeared (1992 and 1993 20 cases, 1994 18 cases, 1995 10 cases, 1996 9 cases, 1997 2 cases). Repeated warnings, the introduction of safety caps and new regulations, particularly for lighter fluids and lamp oil, seem to have been the main reasons for this success.

In adults, severe accidental poisonings with acids and alkalis (18 cases communicated in the year before) have sharply dropped to only 4 moderate cases last year. It is not possible yet to evaluate the reasons for this progress.

## 4 New statistics

As a contribution to the european harmonization of reporting, we introduced this year an additional degree of severity ("moderate").

For next year, we prepare a new classification of products, which has already been tested and considers WHO (ATC) and EAPCCT recommendations as well.

Finally, we propose the introduction of criteria for causality assessment into the statistics of Poisons Centres, in order to prevent mixing of evaluated with doubtful cases. We will introduce a causality assessment system derived from the Karch-Lasagna model used in the domain of adverse drug reactions.

We are prepared to send samples of the planned statistics to interested readers.

## **5 Acknowledgments and perspectives**

The cooperation with related institutions of other countries was again important and enriching, particularly in the planning stage of the 18th International Congress of the European Association of Poisons Centres and Clinical Toxicologists in Zurich.

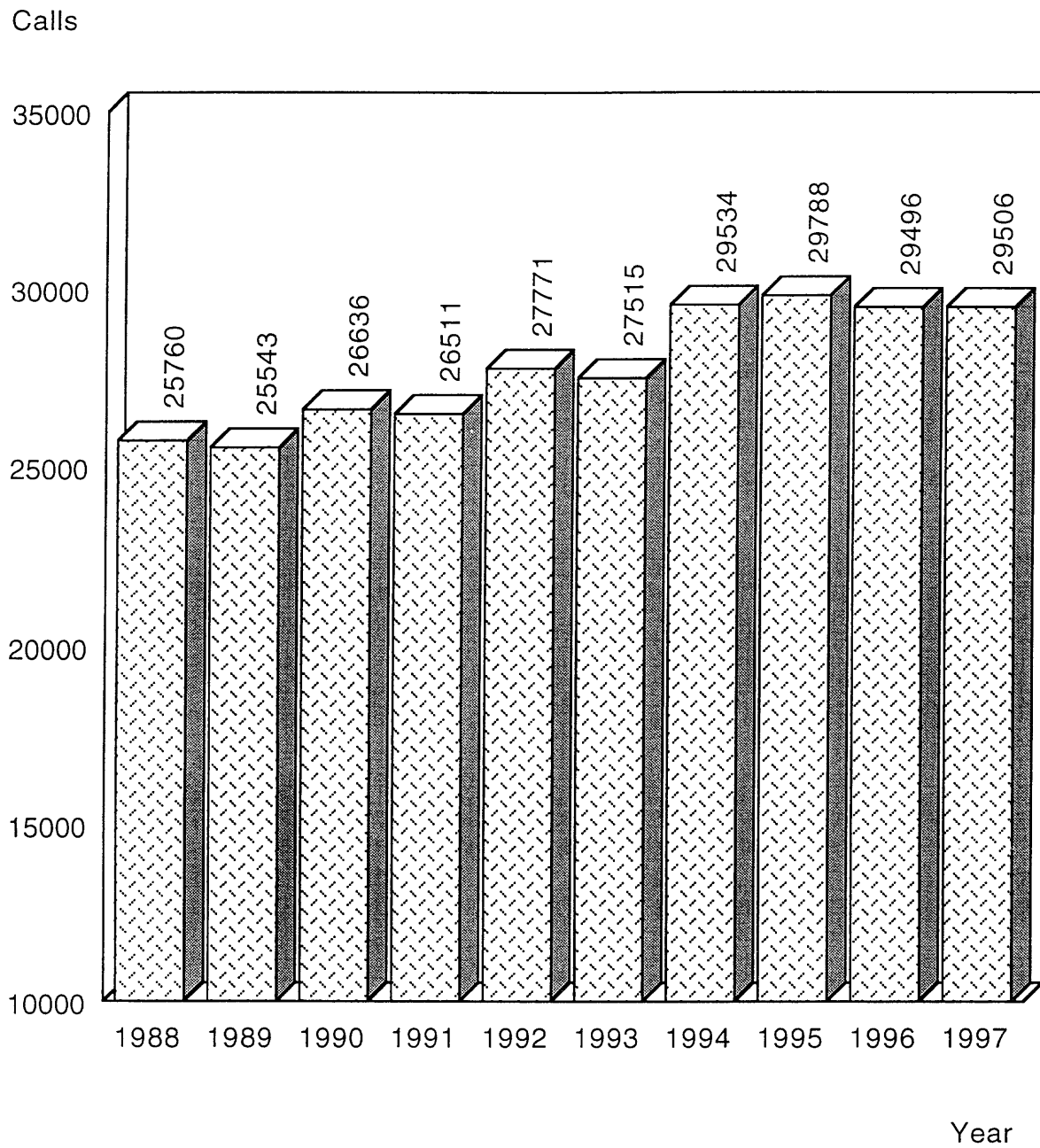
The interactions with authorities, hospitals, practitioners, the industry and prevention-oriented organisations were also productive. Our particular gratitude goes to our main supporting institutions and sponsors (pp. 39-40), as well as to our staff.

The perspectives of our centre are still somewhat darkened on the financial side, but we expect new chances for better services and assistance at a new location in the vicinity of the University Hospital.

Prof. Dr. P.J. Meier-Abt  
Medical Director

J.P. Lorent  
Administrative Director

# 1 Frequency of calls to the centre



## 2 Origin of inquiries (detailed reports)

Origin	Foreign countries	FL	AG	AI	AR	BE	BL	BS	FR	GE	GL	GR	JU	LU
		31'100	534'100	14'900	54'100	938'800	254'800	193'300	230'200	395'900	38'800	186'400	68'600	342'500
General public	57	28	747	14	46	1336	252	281	277	494	43	163	57	281
Hospitals	349	11	317	1	19	637	135	137	210	551	22	93	55	194
Practitioners (Total)	12	7	90	5	12	200	59	28	33	63	12	55	15	82
Allergology			1						4					
Cardiology			1			2			1	1				
Dermatology						1								
Endocrinology								4						
Gastroenterology									1					
General Medicine		2	52	3	10	128	39	4	11	39	10	29	2	63
Gynecology										3				
Hematology														
Internal Medicine			6	2	1	13	6	1	3	3	1	7		5
Neurology			2					2						2
Oncology														
Ophthalmology	1					2		2				1		2
ORL						1			1					1
Pathology								1						
Pediatriy			12			37	12	5	4	2	1	14	3	5
Psychiatry			1			7			2	1		1		
Radiologie			3							1				
Rheumatology			3					2						2
Surgery			2		1	3						1		1
Various			1			6		2	1	10				1
Unknown	11	5	6				2	5	5	3		2	10	
Veterinarians, Vet. Hospitals	3		36	2	3	74	22	8	15	13	3	12		15
Pharmacies	2		18		1	28	8	5	11	26	1	2		3
Dentists						1								
Various organizations	5	1	20		2	52	7	27	9	33	3	3	1	11
Poison centres	12													
Total	440	47	1228	22	83	2328	483	486	555	1180	84	328	128	586
Total in %	2.52	0.27	7.05	0.13	0.48	13.36	2.77	2.79	3.18	6.77	0.48	1.88	0.73	3.36
Expectation in %			7.53	0.21	0.76	13.23	3.59	2.73	3.25	5.58	0.55	2.63	0.97	4.83

NE 165'400	NW 37'200	OW 31'800	SG 444'100	SH 73'600	SO 241'600	SZ 125'100	TG 225'800	TI 305'200	UR 35'800	VD 607'000	VS 273'100	ZG 95'000	ZH 1'180'400	Cas inclassables	Total 7'124'600	Total en %
194	27	22	441	79	241	117	261	150	50	809	219	148	2440	218	9492	54.46
161	5	15	285	54	144	48	126	225	4	384	194	56	819	14	5265	30.21
19	4	10	107	13	59	34	68	43	12	102	54	13	289	25	1525	8.75
10	3	8	71	4	33	24	45	18	5	60	34	5	159		871	5.00
			1							2					6	0.03
			2							2					9	0.05
				2						2	1		3		16	0.10
2								1		1					5	0.03
										1		1			6	0.03
					1								1		3	0.02
				1	1			1		3			3		12	0.07
			2												2	0.01
2			12	1	9	1	8	9	1	9	7	2	27		136	0.78
													2		8	0.05
						2									2	0.01
1					2			1		1			2		15	0.09
												1	3		7	0.04
			1		1										3	0.02
4	1	2	14	3	8	7	12	10	1	17	8	2	42		226	1.30
			3							2	1		7		25	0.14
															4	0.02
							2				2		1		12	0.07
			1				1	3		4	1		14		45	0.26
				2	4				5			2	25	25	112	0.64
11			23	7	12	8	13	9	1	36	7	3	79	5	420	2.41
12	1		8	2	4	1	2	13		33	15	1	41	1	239	1.37
							1						2		4	0.02
6			21	7	9	1	7	13	1	48	7	7	166	5	472	2.71
															12	0.07
403	37	47	885	162	469	210	477	453	68	1412	496	228	3836	268	17429	100%
2.31	0.21	0.27	5.08	0.93	2.69	1.21	2.74	2.60	0.39	8.10	2.85	1.31	22.01	1.53		100%
2.33	0.52	0.45	6.26	1.04	3.41	1.76	3.18	4.30	0.50	8.56	3.85	1.34	16.64			

### 3 Patients

Age		Patients	in %
Children	Total	7752	47.6
	0 - 4 years	5306	32.6
	5 - 9 years	566	3.5
	10 - 15 years	519	3.2
	unknown	1361	8.3
Adults	Total*	8529	52.4
	female	4349	26.7
	male	3077	18.9
	unknown	1103	6.8
Total		16281	100%

\* Adolescents 16-19 years of age were considered adults.

Information was requested from **veterinarians** in 420 cases. When a phone call was related to "several" animals without an exact number, we have estimated the number to be 3. The following animals were involved (phone calls from the public are included in these figures):

495 dogs, 163 cats, 52 cattle, 41 horses, 28 birds, 26 rabbits, 25 pigs, 23 hares, 21 guinea-pigs, 21 goats, 11 chicken, 8 sheeps, 6 fishes, 4 donkeys, 3 degus, 3 rats, 2 anteaters, 2 chinchillas, 2 hamsters, 2 tortoises, 1 bat, 1 marten and 16 unknown animals.

Fatalities in animals with ascertained or probable causality:

The canine species was most frequently involved: Four jung dogs died, in spite of treatment efforts, after ingesting a snail bait (metaldehyde; two cases) or ointments (tacalcitol, fluorouracil). A two-weeks old puppy did not survive the administration of a piperazine anthelmintic. A rodenticide was fatal for another dog. The last fatality was due to the ingestion of a fire-salamander.

Deadly plant poisoning occurred in three goats (Rhododendrons), a hare (Datura suaveolens), a guinea-pig (Nerium oleander) and a cat (Euphorbia pulcherrima). Two other cats perished after having been treated with a permethrin insecticide for dogs. An ox was again victim of fertilizer (urea) poisoning.

## 4 Toxic agents

Moderate, severe  
and fatal cases

	Total number	in %	Total	in %	
4.1	Plants	1475	9.1	14	0.9
4.2	Poisonous animals	375	2.3	8	2.1
4.3	Food toxins and contaminants	879	5.4	31	3.5
4.4	Recreational and abused agents	672	4.1	79	11.8
4.5	Technical and occupational products	981	6.0	36	3.7
4.6	Household products	4909	30.2	64	1.3
4.6.1	Extra-professional hazards of inhalation	268	1.7	16	6.0
4.7	Drugs	6536	40.1	654 *	10.0
4.8	Unclassifiable cases	186	1.1	2	1.1
Total		16281	100 %	904	5.6 %

\* 72 % of all moderate and severe intoxications refer to drugs

In this and the following tables patients are classified according to:

- 1 The total number of persons involved
- 2 The severity grading in cases with written medical feedback

Starting with this report, our classification includes an additional severity grade (moderate):

- N No symptoms, vage symptoms not related to poisoning, or unknown
- Mi Minor symptoms (mild, transient, spontaneously disappearing; treatment is generally not required)
- Mo Moderate symptoms (pronounced or persistant; treatment is generally required)
- S Severe symptoms (severe or life-threatening; treatment is always required)
- F Fatal poisoning
- No classification due to insufficient information.

Possibly severe cases lacking medical feedback, as well as questionable cases are not reported as severe in the following tables.

## 4.1 Plants

	Children			Adults				Total	
	N	Mi	Mo	SF	N	Mi	Mo		SF
<i>Aconitum napellus</i> /Monk's hood		1			2			1	4
<i>Aesculus hippocastanum</i> / Horse chestnut	8	1			3				12
<i>Allium</i> sp.	2	1			12	1			16
<i>Arum maculatum</i> /Lords-and-Ladies	11				5				16
<i>Atropa belladonna</i> /Deadly nightshade	8	1			2	1	3		15
Cactaceae/Cactus family	6				13		1		20
<i>Capsicum annuum</i> /Spanish pepper	6				7	2			15
<i>Clivia miniata</i> /Scarlet Kaffir lily	6				1				7
<i>Convallaria majalis</i> /Lily-of-the-valley	41				4				45
<i>Cotoneaster</i> sp./Cotoneaster	25								25
<i>Daphne mezereum</i> /Mezereon	9				3		1		13
<i>Datura stramonium</i> /Thorn-apple					3		1		4
<i>Datura suaveolens</i> /Angel's-trumpet	7	2			14	5	1		29
<i>Datura</i> sp./ <i>Datura</i>	1				3				4
<i>Dieffenbachia</i> sp./Dumbcane	29				8		1		38
<i>Epipremnum pinnatum</i> /Devil's ivy	8								8
<i>Euonymus europaeus</i> / Europ. spindle tree	15								15
<i>Euphorbia pulcherrima</i> /Poinsettia	25				5				30
<i>Euphorbia</i> sp./Spurge sp.	26	3	2		24	1	2		58
<i>Ficus</i> sp./Fig sp.	40								40
<i>Galanthus nivalis</i> /Snowdrop	6								6
<i>Hedera helix</i> /English Ivy	17				2				19
<i>Heracleum mantegazzianum</i> / Giant Hogweed	5				5				10
<i>Hippeastrum vittatum</i> / Amaryllis, Barbados lily	5				2				7
<i>Hoya carnosa</i> /Wax plant	6								6
<i>Hydrangea</i> sp./Hydrangea	6								6
<i>Ilex aquifolium</i> /English holly	23				1				24
<i>Laburnum anagyroides</i> /Golden chain	5	1				1			7
<i>Ligustrum vulgare</i> /Privet	28								28
<i>Lonicera</i> sp./Honeysuckle	21	1							22
<i>Mahonia aquifolium</i> /Oregon-grape	22								22
<i>Muscari</i> sp./Grape hyacinth	6								6
<i>Narcissus pseudonarcissus</i> /Daffodil	8				4				12
<i>Nerium oleander</i> /Common oleander	4				4	1			9
<i>Philodendron</i> sp./Philodendron	13								13
<i>Prunus laurocerasus</i> /Cherry laurel	82	3			4	1			90
<i>Prunus</i> sp./Stone fruits	7				3				10
<i>Pyracantha coccinea</i> /Fire-thorn	6				3				9
<i>Quercus glans</i> /Oak glans	5				1				6
<i>Ranunculus</i> sp./Buttercup sp.	6				1				7



## Plants (end)

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Sambucus nigra/European elder	13	1			5				19
Schefflera sp./Umbrella tree	9								9
Solanum sp./Nightshade	21				9				30
Sorbus aucuparia/Mountain Ash	16				2				18
Spatiphyllum sp./Spathe flower	13								13
Syngonium podophyllum/ African evergreen	7								7
Taraxacum officinalis/Dandelion	5				1				6
Taxus baccata/Yew	52				4	1	1		58
Thuja occidentalis/White cedar	9				5				14
Tulipa gesneriana/Tulip	8				1				9
Vaccinium uliginosum/Bog bilberry	3				6				9
Viburnum opulus/Guelder rose	14				5				19
Viscum album/Mistletoe	5				1				6
Yucca sp./Yucca	14				1				15
Various plants	228	5			68	4			305
Berries	95	2			7				104
Flower-bulb	1								1
Water from a vase	4				4				8
Combinations, unclassifiable cases, unknown plants	78				14				92
<b>Total</b>	<b>1149</b>	<b>22</b>	<b>2</b>		<b>272</b>	<b>18</b>	<b>11</b>	<b>1</b>	<b>1475</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning,  
SF = Severe or fatal poisoning

## 4.2 Poisonous animals

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Bees, wasps, hornets	55	12			90	3			160
Poisonous snakes	3	1			6	8	3	1	22
Various snakes					1				1
Unknown snakes	3	1			5	2			11
Poisonous fishes	2				12	3	1	2	20
Spineless invertebrates	1				4	3			8
Various	40	2		1	108	2			153
<b>Total</b>	<b>104</b>	<b>16</b>		<b>1</b>	<b>226</b>	<b>21</b>	<b>4</b>	<b>3</b>	<b>375</b>



**Bei  
Knollenblätter-  
pilzvergiftung**

# Legalon<sup>®</sup> SIL

**Legalon<sup>®</sup> SIL**

**Zusammensetzung:** 1 Durchstechflasche mit 598,5 mg Trockensubstanz enthält: Silibinin-C-2',3-dihydrogensuccinat, Dinatriumsalz 528,5 mg (entsprechend 350 mg Silibinin). **Anwen-**

**dungsgebiet:** Leberintoxikation durch Knollenblätterpilze. **Neben-**

**wirkungen:** In einzelnen Fällen kann es während der Infusion zu Hitze-

**gefühl (Flush) kommen. Darreichungsform und Packungsgröße:**

Packung mit 4 Durchstechflaschen Trockensubstanz SFR 755.75

**BIO/MED**

**NATUR & WISSEN**

MADAUS AG, Köln

Biomed AG, 8600 Dübendorf

### 4.3 Food toxins and contaminants

	Children			N	Adults			Total
	N	Mi	Mo		SF	N	Mi	
Food of immanent toxicity								
identified mushrooms (see below)	35	4	6	111	22	17	1	196
unidentified mushrooms	86	3		64	21	5		179
Food presumably contaminated by								
toxins producing bacteria	78			236	2	1		317
Molding food	28			32				60
Various (incl. doubtful cases)	52			74			1	127
<b>Total</b>	<b>279</b>	<b>7</b>	<b>6</b>	<b>517</b>	<b>45</b>	<b>23</b>	<b>2</b>	<b>879</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning, SF = Severe or fatal poisoning

#### Identified mushrooms

	Children			N	Adults			Total
	N	Mi	Mo		SF	N	Mi	
<i>Agaricus xanthodermus</i> / Yellow stainer mushroom				2	1			3
<i>Amanita muscaria</i> /Fly-agaric	1			3	2	1		7
<i>Amanita phalloides</i> /Death cap	4			6	2	3		15
<i>Armillaria mellea</i> /Honey mushroom	2	1		2	2			7
<i>Boletus edulis</i> /Yellow boletus				10	1			11
<i>Boletus</i> sp./Bolete sp.	4			13	7	4	1	29
<i>Cantharellus cibarius</i> /Chanterelle	1		1	7				9
Champignons de Paris/ Commercial mushroom	1			3				4
<i>Clitocybe nebularis</i> ./Cloded agaric						2		2
<i>Gyromitra esculenta</i> /False morel	3			17				20
<i>Inocybe</i> sp./ <i>Inocybe</i> sp.	2			2				4
<i>Lactarius</i> sp./ <i>Lactarius</i> sp.				2	1			3
<i>Psilocybe</i> sp./ <i>Psilocybe</i>				13	1	5		19
<i>Rhodophyllus sinuatus</i> / Lead-colored lawn mushroom	3			2				5
<i>Tricholoma</i> sp./ <i>Tricholoma</i> sp.	1		5	1	1			8
Various	13	3		28	4	2		50
<b>Total</b>	<b>35</b>	<b>4</b>	<b>6</b>	<b>111</b>	<b>22</b>	<b>17</b>	<b>1</b>	<b>196</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning, SF = Severe or fatal poisoning

#### 4.4 Recreational and abused drugs

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Tobacco, mostly accidental ingestion	224	22		1	15	3			265
Alcoholic beverages	24	4	2	1	46	3	5	5	90
Cannabis	6	6	3		45	4	9	1	74
Cocaine					31	3	3	2	39
Heroin and opiates	5				21	3	1	3	33
LSD	1				3		1		5
Various hallucinogens	1	1			23	6	4	4	39
Combinations			2		24	13	11	11	61
Various	7	1		1	41	7	8	1	66
<b>Total</b>	<b>268</b>	<b>34</b>	<b>7</b>	<b>3</b>	<b>249</b>	<b>42</b>	<b>42</b>	<b>27</b>	<b>672</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning, SF = Severe or fatal poisoning

The registered number of alcoholic intoxications remains insignificant, since there is rarely a need of information in the treatment of such cases. Moreover, because of a large number of unknown cases, the numbers concerning other drugs of abuse are not representative either.

**Substitutes** like cough drops, analgesics, asthma cigarettes, tranquilizers and solvents are not included here; they can be found under the respective headings in the following chapters.

#### 4.5 Technical and occupational products

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Acids	13	2			70	13	3		101
Adhesives	1				2		2		5
Alcalies	14	1			27	6	1		49
Anti-rust products					1				1
Chlorine gas	11		1		24	5			41
Cleaning products	13	2			28	9	4		56
Combustibles (gasoline, fuel oil, petroleum and lamp oil)									
ingestion	64	15	2		50	9			140
inhalation	8				26				34
other routes	5	2			8	1	1		17
Cyanides	1				3	1		1	6
Disinfectants (occupational)					7		1		8

## Technical and occupational products (end)

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Hardeners	1				7		2		10
Industrial salt	16								16
Irritant gases	1				24	11		1	37
Laboratory reagents	7				7				14
Lime, slaked	1		1		1	1			4
Lime, unslaked	2				2		1		5
Lubricating oil	14	2		1	11	4			32
<b>Metals</b>									
Lead and mercury compounds					1				1
Other metal compounds	7				24	2	1		34
Paints and varnishes for technical use	2				21	3	1		27
Plastics					10	1			11
Preservatives	6				3				9
Silage products and gases	1				2		1		4
Soldering and welding products, incl. vapors	2	1			21	8	1		33
Solvents for occupational use	3				17	6			26
Thinners (for artificial resins and paints)	12	1			29	5	2	1	50
Various gases, vapors, dust at work	2	1			86	15	5		109
Various occupational and industrial agents	14				34	9			57
Unknown products					1				1
Combinations	5	1	1		29	6	1		43
<b>Total</b>	<b>226</b>	<b>28</b>	<b>5</b>	<b>1</b>	<b>576</b>	<b>115</b>	<b>27</b>	<b>3</b>	<b>981</b>

A clear distinction between occupational and non occupational poisoning was not always possible. Some occupational exposures may be shown under 4.6 (household products).

## 4.6 Household products

Specific household products	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Adhesives	58				54	2	1		115
Air fresheners (mostly essential oils)	76	4			7				87
Batteries/Battery content	96	5			25				126
Bleaching agents (particularly Javelle water, H <sub>2</sub> O <sub>2</sub> )	66	12			92	23	1	1	195

# FLATULEX<sup>®</sup>

## Kautabletten und Tropfen

### Antiflatulans

#### Zusammensetzung

**1 Kautablette** enthält:

Wirkstoff: Simethiconum 42 mg. Hilfsstoffe: Aromatica: Carvi aetheroleum, Foeniculi aetheroleum, Menthae piperitae aetheroleum, Excipients pro compresso.

**1 ml Tropfen** (2 Pumpstösse) enthält:

Wirkstoff: Simethiconum 41,2 mg. Hilfsstoffe: Cyclamas, Aromatica, Conservans: E 200. Excipients ad solutionem.

#### Eigenschaften/Wirkungen

Der Wirkstoff von Flatulex ist Simethicon, ein aktiviertes Dimethylpolysiloxan. Simethicon ist physiologisch inert und führt auf rein physikalischem Weg durch seine oberflächenaktiven und entschäumenden Eigenschaften zur Elimination von Darmgasen.

#### Pharmakokinetik

Simethicon wird nicht resorbiert und deshalb unverändert in den Faeces ausgeschieden.

#### Indikationen/Anwendungsmöglichkeiten

Zur symptomatischen Behandlung aller Formen übermässiger Gasansammlung oder Gasbildung im Magen-Darm-Bereich, wie Meteorismus (auch postoperativ), Flatulenz, Aerophagie und gastrokardialer Symptomenkomplex.

Zur Prämedikation vor röntgenologischen und sonographischen Untersuchungen im Bauchbereich zur Reduktion von Gasschatten.

**Als Antidot bei peroralen Vergiftungen mit Detergenzien.**

#### Dosierung/Anwendung

Uebliche Dosierung bei der symptomatischen Behandlung:

Zu oder nach jeder Mahlzeit und vor dem Schlafengehen

Erwachsene: 1 - 2 Kautabletten oder 2 - 4 Pumpstösse

Schulkinder: 1 Kautablette oder 2 Pumpstösse

Säuglinge und Kleinkinder: 1 - 2 Pumpstösse.

**Kontraindikation:** Ileus.

#### Unerwünschte Wirkungen

Infolge Nichtresorption treten selbst bei Einnahme hoher Dosen keine Nebenwirkungen auf.

**Packungen** mit 50 und 200 Kautabletten und Flasche mit Dosierpumpe zu 50 ml.

Weitere Angaben entnehmen Sie bitte der Packungsbeilage oder dem Arzneimittel-Kompendium der Schweiz.

#### Vertrieb:

Globopharm AG, 8700 Küsnacht ZH



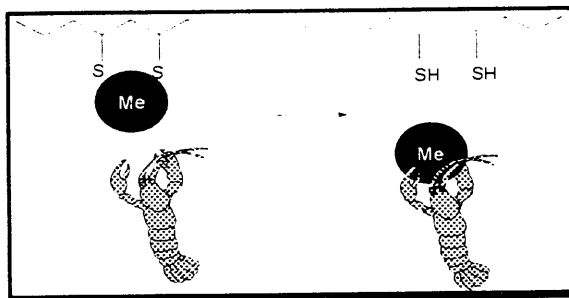
GLOBOPHARM AG

## Household products (cont'd.)

Specific household products	Children			Adults				Total	
	N	Mi	Mo	SF	N	Mi	Mo		SF
Car and bicycle products (polish, defroster etc.)	28	1	1		21	8	2		61
Cleaning agents									
for artificial teeth	4				3				7
for carpets and upholstery	13	1			9				23
for contact lenses	12				13	1			26
for cooking-stove and oven	13	2			4	5			24
for floors (except oil of turpentine)	3		1		12	4	1		21
for flat-irons	1								1
for laundry (including fabric softener and starch)	168	8			12	2			190
for metals	12	1			9	2			24
for toilets (including drain, bathtub and sink)	106	2			23	4	3	1	139
for windows	39	1			10	4			54
dishwashing agents: manual	220	12			41	4			277
dishwashing agents: automatic	142	6	1		24	8	2		183
multipurpose cleaners	135	12	3		20	5	1		176
nitro thinners	15	2			4	1			22
oil of turpentine and turpentine substitutes	17	5	1		12	1	1		37
solvents (except oil of turpentine)	24	5	2		72	15	3	1	122
stain removers	6	2			10	1			19
various	49	4	1		47	10			111
Cooling liquids	10	2			125	11	1		149
Decalcifying agents	106	8			114	16	1	2	247
Disinfectants for household purpose	34	1			30	9			74
Fertilizers	48	3			17	3			71
Fire extinguisher contents	2				10	1			13
Floor polish	10				8				18
Furniture polish	21	1	1		6	1			30
Impregnating agents	11				4				15
Insulating and sealing agents	7				21	2	2		32
Leather dressings (also shoe polish)	8	1							9
Light sources	3				2				5
Photochemicals and photo- print liquids	2				9				11
Products to set fire: solid	26	2			1				29
liquid	33	8			22	5	1	1	70
Toilet articles and cosmetics									
bath additives and soap	196	5			25	2			228
care of the skin and make-up	33	4			2				39
eau de Cologne	11	1			4				16

# SCHWER- METALLE

wie z.B. Quecksilber, Blei oder Arsen können sowohl zu chronischen wie auch akuten Vergiftungen mit unterschiedlichsten klinischen Symptomen führen. Eine möglichst rasche Diagnose und der Nachweis des Schwermetalls sind die Voraussetzung für eine erfolgreiche Therapie.



# DIMAVAL<sup>®</sup> (DMPS) DMPS-HEYL<sup>®</sup>

sind effektive Antidota zur Therapie verschiedener Schwermetallvergiftungen. Der Chelatbildner (RS)-2,3-Dimercapto-1-propansulfonsäure (DMPS) bildet mit den Schwermetallen stabile Komplexe, die vorwiegend über die Nieren ausgeschieden werden. Bei frühzeitiger Gabe von DMPS können die klinischen Symptome einer Schwermetallvergiftung weitgehend vermieden werden.

Kapseln: **Dimaval<sup>®</sup> (DMPS)**; Injektionslösung: **DMPS-Heyl<sup>®</sup>**. **Wirkstoff:** (RS)-2,3-Dimercapto-1-propansulfonsäure (DMPS) Natriumsalz, Monohydrat. Verschreibungspflichtig. **Zusammensetzung:** Eine Kapsel enthält 108,56 mg (RS)-2,3-Dimercapto-1-propansulfonsäure (DMPS) Natriumsalz, Monohydrat entsprechend 100 mg DMPS Natrium; **Sonstige Bestandteile:** hochdisperses Siliciumdioxid, Maisstärke, Gelatine, Titandioxid (E171), Wasser, Natriumdocylsulfat. 1 Ampulle mit 5 ml Injektionslösung enthält 271,4 mg (RS)-2,3-Dimercapto-1-propansulfonsäure (DMPS) Natriumsalz, Monohydrat entsprechend 250 mg DMPS Natrium; **Sonstige Bestandteile:** Wasser für Injektionszwecke. **Anwendungsgebiete:** Klinisch manifeste, chronische und akute Vergiftungen mit Quecksilber (anorganische und organische Verbindungen, Dampf, metallisches Quecksilber), chronische Vergiftungen mit Blei. **Gegenanzeigen:** DMPS darf nicht angewandt werden bei Überempfindlichkeit gegen DMPS oder seine Salze. Besondere Vorsicht ist geboten bei Injektion von DMPS-Heyl bei Patienten mit allergischer asthmatischer Symptomatik. **Nebenwirkungen:** Gelegentlich können Schüttelfrost, Fieber oder Hautreaktionen vermutlich allergischer Natur, wie Juckreiz oder Hautausschläge (Exantheme oder Rash) auftreten, die nach Absetzen der Therapie in der Regel reversibel sind. In Einzelfällen sind schwere allergische Hauterscheinungen (z.B. Erythema exsudativum multiforme, Stevens-Johnson-Syndrom) beschrieben worden. Vor allem bei länger andauernder Anwendung kann DMPS den Mineralstoffhaushalt, insbesondere die Elemente Zink und Kupfer beeinflussen. Durch die Gabe von DMPS erfolgt eine Mobilisierung des aufgenommenen Quecksilbers im Körper. In Einzelfällen können dadurch die klinischen Symptome der Quecksilbervergiftung ausgelöst werden. In Einzelfällen kann ein erhöhter Spiegel an bestimmten Enzymen (Transaminasen) festzustellen sein. Selten kommt es nach Einnahme von Dimaval (DMPS) zu Übelkeit. Herz-Kreislauf (kardiovaskuläre)-Reaktionen können, insbesondere bei zu schneller Injektion von DMPS-Heyl auftreten und äußern sich in Blutdruckabfall, Übelkeit, Schwindel, Schwäche, in der Regel kurze Zeit nach der Injektion.

*Heyl*

HEYL D-14167 Berlin

Stand: 01.05.98

Für detaillierte Informationen fordern  
Sie unsere **wissenschaftliche  
Produktmonographie** an.

**Heyl** Goerzallee 253  
D-14167 Berlin

Tel (0)30-816 96-26  
FAX (0)30-817 40 49  
Email: HEYLWAJR@AOL.COM



## Household products (cont'd)

Specific household products	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
deodorants	5								5
hair care products	23				17	2			42
nail polish and nail hardeners	20				2				22
nail polish removers	23	2			3				28
perfume	76	2			4	1	1		84
shampoo	88	2			5				95
shaving lotions	6	1			1				8
skin cream	53				3				56
toothpaste, mouth-wash	15				2				17
various	20				3	2			25
Toilet deodorants	109				1				110
Toys and sport accessories (including lead bullets, tin soldiers and trick products)	130	6			23	2			161
Wood dressing products	12	1			33	4	1		51
Writing and drawing materials									
artists colours (oil- and water-colours)	9				1				10
coal and wax crayons for children	7				2	1			10
correction liquid for typewriter	7				2				9
drawing-ink and ordinary ink	13				2	1			16
felt pencils	6								6
marking ink	2								2
varnishes, synthetic resins and paints	45	3	1		30	4	1		84
various (textile and egg paints)	13				7	1			21
Various	40	6	1		52	7	2		108
Combinations (two or more products)	25	4			53	22	9	1	114
Unknown household products		1							1
Trivial cases									
candles	3								3
dessicators	15				3				18
foreign bodies	62				44				106
matches and match boxes	13				1				14
packing materials	10				2				12
thermometer content	43	1			33				77
<b>Subtotal</b>	<b>2757</b>	<b>150</b>	<b>13</b>		<b>1253</b>	<b>197</b>	<b>34</b>	<b>7</b>	<b>4411</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning,  
SF = Severe or fatal poisoning

## Household products (end)

Pesticides	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Algicides	6	2			1				9
Formicides	28	1			3	1			33
Fungicides	4	1			9	2			16
Herbicides	6	1			23	1	1	1	33
Insecticides									
mothballs	22	3			5				30
various (mostly organophosphates)	64	3			86	16	1	1	171
Phytoregulators					1				1
Repellents	51	4			6		1		62
Rodenticides	41				14	1	2	1	59
Seed preserving products and preserved grains	3								3
Snail baits	35		1		2				38
Various	16				25	1		1	43
<b>Subtotal</b>	<b>276</b>	<b>15</b>	<b>1</b>		<b>175</b>	<b>22</b>	<b>5</b>	<b>4</b>	<b>498</b>
<b>Total Household products</b>	<b>3033</b>	<b>165</b>	<b>14</b>		<b>1428</b>	<b>219</b>	<b>39</b>	<b>11</b>	<b>4909</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning,  
SF = Severe or fatal poisoning

### 4.6.1 Extraoccupational inhalation hazards

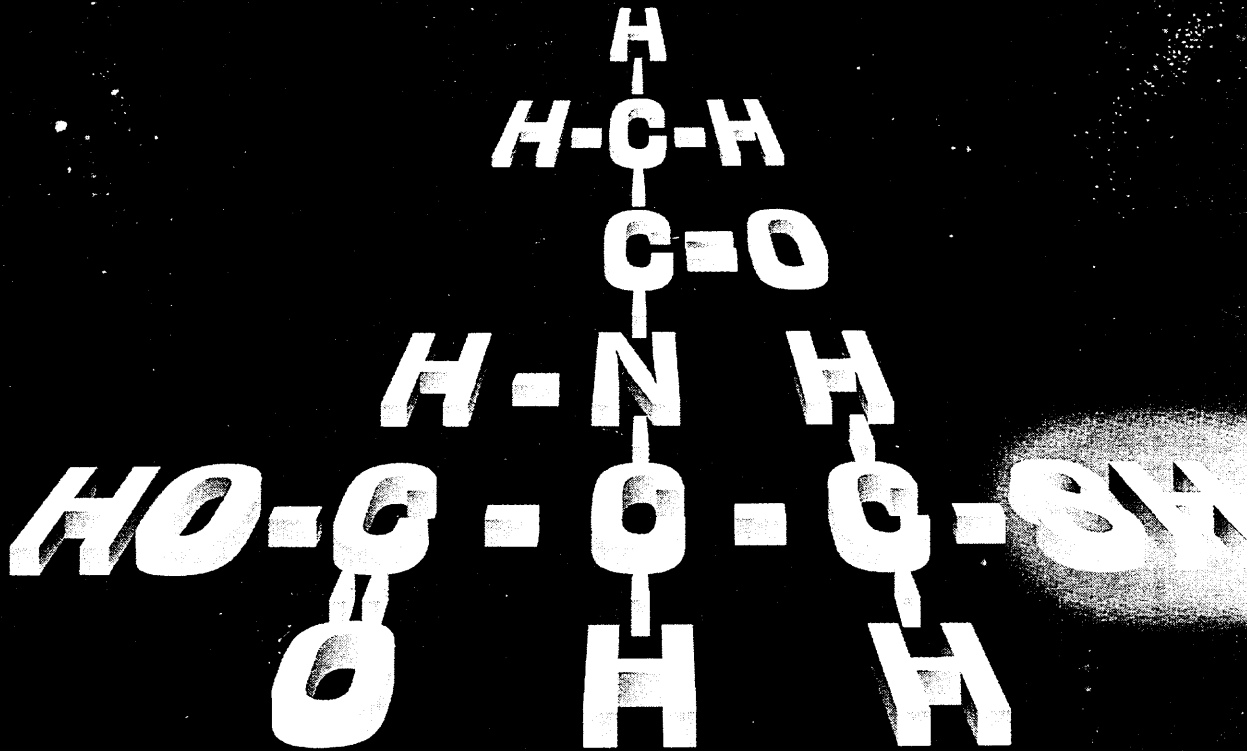
	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Chlorine dioxide and ozone	5	5			2	2			14
Carbon monoxide (exhaust gases, oven gases, gas for cooking)	33	2		1	111	22	8	6	183
Manure gases	1				4				5
Nitrous gases					3				3
Propane, methane, butane gas	6				14	2	1		23
Tear gas	5	2			9	2			18
Various	4				18				22
<b>Total</b>	<b>54</b>	<b>9</b>		<b>1</b>	<b>161</b>	<b>28</b>	<b>9</b>	<b>6</b>	<b>268</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning,  
SF = Severe or fatal poisoning

## 4.7 Drugs

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Analeptics	4								4
Analgesics (antiphlogistics)									
opiates	10	4		2	40	6	2		64
paracetamol	47	3	2		74	16	6	2	150
salicylates	40	6			59	12	3	2	122
combinations	24	3			25	15	2		69
various	5		1		10	4			20
Anorectics	8	1	2		14	5	2	1	33
Antacids, anti-ulcer agents	12	1			8	1			22
Antiallergics (antihistaminics)	66	8	1		18	3	1		97
Antiasthmatics	33	1	2	3	7	2	1	1	50
Antibronchitics (external)	43	3			1				47
Anticoagulants	11	1			9	2		1	24
Antidiabetics	3				10	1	2	1	17
Antidiarrhetics	12	3			6	3			24
Antidotes	1				4		2		7
Antiemetics	20	3	5	1	10	2	3		44
Antiepileptics	19	7	1	1	34	16	9	4	91
Antihelmintics	4				1				5
Antimycotics	17				9				26
Antiparasitics (cutan.)	5				10				15
Anti-Parkinson agents	5				11		6		22
Antipyretics, flu preparations	3	2			1				6
Antirheumatics (oral and cutan.)	104	7		1	107	28	10	4	261
Antitussives, expectorants, secretolytics	150	33	7	2	49	15	10		266
Cardiac drugs									
antiarrhythmics	3		1	1	2			2	9
beta blockers	18	1			19	4	3	1	46
cardiac glycosides	7				5	4	2		18
various	6				1	1			8
Chemotherapeutics									
antibiotics	42				40	8	1		91
antiprotozoal drugs	2			1	13	3	1		20
cytostatics	4				7			1	12
sulfonamides	4	1			7				12
various	5				8	1	1		15
Cholagogues, cholaretics, drugs against hepatopathies	2				1				3
Dental drugs	21	6		1					28
Dermatological drugs	98	5	2		38	6	1		150

# FLUIMUCIL®



## ANTIDOT

### Injektionslösung

FLUIMUCIL® 20% : Stechampulle (25 ml) zu 5 g N-Acetylcystein

zur Behandlung von Vergiftungen mit

### Paracetamol

Acrylnitril - Methacrylnitril - Methylbromid  
Tetrachlorkohlenstoff

Z: Acetylcystein. I: Antidot bei akuter Paracetamol-Vergiftung, akutem Leberversagen nach Paracetamol-Vergiftung.  
D: Infusionen mit: 150 mg/kg in 250 ml 5 % Glukose-Lösung während 15 Min., 50 mg/kg in 500 ml 5 % Glukose-Lösung während 4 Std., 100 mg/kg in 1000 ml 5 % Glukose-Lösung während 24 Std. bis zum Verschwinden der Enzephalopathie fortführen. KI: Keine Kontraindikationen bekannt. N-Acetylcystein - Überempfindlichkeit. P: Stechampulle zu 25 ml 20% Lösung (5g N-Acetylcystein): [B]. Ausführliche Angaben entnehmen Sie bitte dem Arzneimittelkompendium der Schweiz.  
Weitere Informationen erhalten Sie bei INPHARZAM AG, 6814 Cadempino / TI 091 / 960 41 11



**Inpharzam**  
Zambon Group

## Drugs (cont'd)

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Diagnostic agents	1				2		1	1	5
Disinfectants, antiseptics									
external	66	3		1	29	2	1		102
internal	2				4	1			7
Diuretics	3				4				7
Drugs against alcoholism (partly taken with alcohol)	2				14	3	6		25
Essential oils (alone and in combination)	113	17	1		39	4			174
Gastrointestinal drugs	14				5	1			20
Geriatrics, roborants	5				7				12
Gout remedies	1				3				4
Gynecological preparations, various (excl. hormones)	6				8	1			15
Hormone preparations									
oral contraceptives	22	2			6				30
cortisone and derivates	11				6				17
various	17	5			9	4	1		36
Hypnotics									
barbiturates	5	1			8	6		6	26
benzodiazepines	19	10	1		159	66	11	8	274
diphenhydramine	3		1		43	27	14	2	90
methaqualone containing					10		3	1	14
combinations	2				14	8	2	1	27
various	3				15	3	2	1	24
Iron preparations	17	1			9	3	3		33
Laxatives	10				7	1			18
Local anesthetics	1				11			1	13
Migraine preparations									
ergotamine	4				3	2	1		10
various		1			2		1		4
Narcotics					1				1
Neurovegetative sedatives	12	7	1		51	20	10	2	103
Odontologic drugs	3	1			6				10
Ophthalmologics	22	5			4				31
ORL-preparations (incl. lozenges)	219	26	2		18				265
Psychopharmacologic drugs									
amphetamines and derivatives	3	2			3		1		9
antidepressives	36	7	2		166	72	36	14	333
neuroleptics	25	10	2	1	96	55	25	6	220
tranquilizers: benzodiazepines	68	21	1		227	106	20	8	451
tranquilizers: various	3	1	1		27	12	5	1	50
Spasmolytics	15	3			19	7	2	2	48

## Drugs (end)

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
Vaccines, sera	3				14	1			18
Vascular drugs									
antihypertensives	28	2			15	13			58
vasodilators	19	1			10	2	1		33
vasopressors	11		2		5	2	2		22
venotonics	11			1	4		1		17
Veterinary drugs	30		1		18		2		51
Vitamin and calcium preparations	29		1		16				46
Trivial cases									
homeopathic drugs	56	2	1		11				70
agents for caries prophylaxis	27	3							30
sweetening agents	2								2
Various	22	2			33	4	1		62
Unidentified	14				24		1		39
Combinations (excl. alcohol)	97	37	8	2	655	399	134	83	1415
Combinations (incl. alcohol)	1	2			96	93	50	25	267
<b>Total</b>	<b>1941</b>	<b>271</b>	<b>49</b>	<b>18</b>	<b>2594</b>	<b>1076</b>	<b>405</b>	<b>182</b>	<b>6536</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning, SF = Severe or fatal poisoning

The most frequent severe cases in this collection are due to intentionally overdosing several drugs. Psychopharmaceuticals and hypnotics are most frequently involved in severe monocausal poisoning.

### 4.8 Unclassifiable cases

	Children				Adults				Total
	N	Mi	Mo	SF	N	Mi	Mo	SF	
<b>Total</b>	<b>38</b>	<b>1</b>			<b>143</b>	<b>2</b>		<b>2</b>	<b>186</b>

N = No symptoms or unknown, Mi = Minor poisoning, Mo = Moderate poisoning, SF = Severe or fatal poisoning

## 5 Situations

Toxic agents	Accidents		Self-poisoning		Other		Total
	<16 y.	Adults	<16 y.	Adults	<16 y.	Adults	
Plants	1167	204		5	6	93	1475
Poisonous animals	120	251			1	3	375
Food toxins and contaminations	259	77			33	510	879
Recreational and abused agents	287	1	1	50	24	309	672
Technical and occupational products	258	612		14	2	95	981
Household products	3177	1329	9	139	26	229	4909
Extra-professional hazards of inhalation	60	169		6	4	29	268
Drugs	2026	180	156	3052	97	1025	6536
Unclassifiable cases	25	23	1	3	13	121	186
<b>Total</b>	<b>7379</b>	<b>2846</b>	<b>167</b>	<b>3269</b>	<b>206</b>	<b>2414</b>	<b>16281</b>

Situations	Total number		Percentage of moderate, severe or fatal poisoning	
	Total	in %	Total	in %
Accidents	10225	62.8	118	1.2
Self-poisoning	3436	21.1	566	16.5
Other	2620	16.1	220	8.4
<b>Total</b>	<b>16281</b>	<b>100 %</b>	<b>904</b>	<b>5.6 %</b>

## 6 Outcome

In cases with potential or manifest poisoning the physicians received a written feedback together with a questionnaire. A written medical report on the outcome was obtained in 75 % of these cases.

Outcome	Total	in %
No symptoms *	916	23.2 %
Minor **	2119	53.8 %
Moderate **	643	16.3 %
Severe **	251	6.4 %
Fatal **	10	0.3 %
<b>Total</b>	<b>3939</b>	<b>100 %</b>

\* All cases

\*\* Only cases with ascertained or probable causality

In fatal cases, a distinction is made between consultations intra vitam and those post mortem (\*).

Confirmed or suspected cause of death	Victim	Situation
<b>Non-medicinal agents:</b>		
Paraquat	52 y., m.	suicide
Parathion (*)	78 y., m.	suicide
<b>Medicinal agents:</b>		
Amitriptyline	36 y., f.	suicide
Clorazepate potassium, trimipramine	43 y., f.	suicide
Maprotiline, haloperidol	42 y., m.	suicide
Methylpentynol (*)	22 y., f.	suicide
Propafenone, diphenhydramine, alcohol (*)	50 y., m.	suicide
Propranolol (*)	20 y., f.	suicide
Thiopental, lorazepam	45 y., m.	suicide
Trimipramine, thioridazine	38 y., f.	suicide
<b>Total</b>	<b>10 fatalities</b> <b>(including 4 cases post mortem *)</b>	



## Publications

Ordering  
number

- Annual report 1996.  
Swiss Toxicological Information Centre  
Zurich, 44 p. (1997) 0-97
- Armbruster J.M. Erfassung und Bearbeitung von unerwünschten  
Arzneimittelwirkungen (UAW) am Schweizerischen  
Toxikologischen Informationszentrum 1990-1993.  
Dissertation University of Zurich, 57 p. (1997) 1-97
- Eichenberger K. Akute Kohlenmonoxidintoxikationen von  
1971 bis 1995 in der Schweiz.  
Dissertation University of Zurich, 57 p. (1997) 2-97
- Kupferschmidt H.  
Meier-Abt P.J. Is there a role for L-carnitine in the treatment of  
valproic acid induced acute or chronic  
hepatotoxicity?  
Abstract EAPCCT, Scientific Meeting 1997,  
July 2-5 Oslo, Norway (1997) 3-97
- Malik Z. Akute schwere und tödliche Kindervergiftungen  
von 1986 bis 1995: eine retrospektive Fallanalyse  
aus dem Schweizerischen Toxikologischen  
Informationszentrum (STIZ).  
Dissertation University of Zurich, 42 p. (1997) 4-97
- Meier-Abt P.J. Role of N-Acetylcysteine in other types of  
poisoning.  
Abstract EAPCCT, Scientific Meeting 1997,  
July 2-5 Oslo, Norway (1997) 5-97

## **Announcements**

### **North American Congress of Clinical Toxicology 1998**

**Orlando, Florida September 10-15, 1998**

Contact: NACCT  
c/o CFCM  
11900 Silvergate Drive, Dublin CA 94568-2257

Tel: ++ 510 828 71 00  
Fax: ++ 510 828 21 21  
E-mail: [nacct@cforums.com](mailto:nacct@cforums.com)

### **Third Meeting on computer as an aid in Poison Centres**

**Lille, December 9-12, 1998**

Contact: Local organizer: Dr. Monique Mathieu-Nolf  
Centre Antipoison, CHRU  
5 avenue Oscar Lambret  
59037 Lille Cedex - France

Tel: ++ 33 3 20 44 44 44  
Fax: ++ 33 3 20 44 56 28  
E-mail: [mmathieu@chru-lille.fr](mailto:mmathieu@chru-lille.fr)

### **XIX International Congress of the European Association of Poisons Centres and Clinical Toxicologists**

**Dublin, June 23-26, 1999**

Contact: Local organizer: Dr. J.A. Tracey  
National Poison Information Centre  
Beaumont Hospital P.O. Box 1297  
DUBLIN 9 Ireland

Tel: ++ 3531 837 99 66  
Fax: ++ 3531 837 69 82

**Publications (end)**Ordering  
number

- |   |   |       |
|---|---|-------|
| Mühlebach S.*<br>Kupferschmidt H.<br>Steger P.*<br>Conen D.*<br>Wyss P.A. | Combination therapy with glycine and charcoal<br>in the treatment of acute salicylate poisoning.<br><br>Abstract EAPCCT, Scientific Meeting 1997,<br>July 2-5 Oslo, Norway (1997)   | 6-97  |
| Rauber-Lüthy C.   | Schwere und tödliche Säure- und Laugenver-<br>ätzungen: Eine retrospektive Fallanalyse aus dem<br>Schweizerischen Toxikologischen Informations-<br>zentrum (STIZ).<br><br>Dissertation University of Zurich, 46 p. (1997) | 7-97  |
| Rauber-Lüthy C.<br>Meier-Abt P.J.<br>Kupferschmidt H.                     | Kein Nutzen der Kortikosteroid-Therapie bei<br>Säure- und Laugenverätzungen des Oesophagus<br>und Magens.<br><br>Schweiz. Medizinische Wochenschrift<br>127 (Suppl. 93), 17 p. (1997)                                     | 8-97  |
| Rötheli-Simmen B.*<br>Kupferschmidt H.<br>Martinelli E.*<br>Mühlebach S.* | Formulation of a stable calcium gluconate gel<br>for topical treatment of hydrofluoric acid burns.<br><br>Abstract EAPCCT, Scientific Meeting 1997,<br>July 2-5 Oslo, Norway (1997)                                       | 9-97  |
| Stern N.<br>Kupferschmidt H.<br>Meier-Abt P.J.                            | Course and Treatment of Acute Colchicine<br>Poisoning.<br>(Text in german, summary in english)<br>Schweiz. Rundschau für Medizin (PRAXIS)<br>86 (22) 952-956 (1997)   | 10-97 |
| Wyss P.A.<br>Gossweiler B.  | Therapie akuter Vergiftungen.<br><br>In: medkalender<br>Schwabe Verlag Basel, 119, 793-818 (1997)   | 11-97 |

\* Authors not belonging to the STIC

## Antidotes for poisoning

Translated excerpt from: Antidote bei Vergiftungen, Bulletin Bundesamt für Gesundheit 98 (5), 23-28 (1998).

### 1. Basic kit for public pharmacies

Substance	Estimated daily dose per case of poisoning
Activated charcoal	Adult 50 - 250 g Child 15 - 100 g
Amyl nitrite, 0.3 ml/amp.	1 - 10 amp.
Biperiden, 2 mg/tabl.	Adult 1 - 16 mg; child 1 - 6 mg
Calcium gluconate, hydrogel	100 - 300 g
Dimeticon, drops or tabl.	Adult 80 - 320 mg; child 40 - 200 mg
N-Acetylcysteine, powder	Adult 30 g; child 5 - 15 g
Polyethylene glycol 400	500 - 1000 ml

### 2. Basic kit for hospitals

This kit additionally contains:

Substance	Estimated daily dose per case of poisoning
Atropine, 0.5 mg/ml, 1 ml/amp.	Adult 5 - 50 mg; child 0.5 - 10 mg
Biperiden, 5 mg/ml, 1 ml/amp.	Adult 2.5 - 20 mg; child 1 - 6 mg
Calcium, e.g. 0.2 mmol/ml or 0.7 mmol/ml, 10 ml/amp.	10 - 20 mmol
Colestyramine, 4 g/sachet	12 g
Dantrolene, 20 mg dry subst./vial	240 - 960 mg
Ethanol 96%	300 g
Flumazenil, 0.1 mg/ml, 5 or 10 ml/amp.	Adult 0.3 - 10 mg; child 0.1 - 2 mg
Glucagon, 1 mg/ml, 10 mg lyophilizate/amp.	20 mg
Magnesium, e.g. 0.4 or 0.8 mmol/ml, 5 or 50 ml/amp.	60 mmol
N-Acetylcysteine, 200 mg/ml, 25 ml/vial	Adult 30 g; child 5 - 15 g
Naloxone, 0.4 mg/ml, 1 ml/amp.	Adult 0.4 - 10 mg; child 0.1 - 0.8 mg
Neostigmine, 0.5 mg/ml, 1 ml/amp.	Adult 0.5 - 2.5 mg; child 0.25 - 1 mg
Phytomenadione, 10 mg/ml, 1 ml/amp.	5 - 20 mg
Polystyrene sulphonate, Sodium-	30 g
Pyridoxine, 50 mg/ml, 2 ml/amp.	5 - 10 g

### 3. Supplementary kit for regional centres

This kit additionally contains:

Substance	Estimated daily dose per case of poisoning
Atropine, 0.5 mg/ml, 100 ml/vial	Adult 5 - 50 mg; child 0.5 - 10 mg
Calcium disodium edetate, 0.19 g/ml (0.5 mol/l), 10 ml/amp.	5 - 7.7 mmol
Deferoxamine, 500 mg dry subst./vial	Adult 6 g; child 1 - 2 g
Digitalis-Antidote, 80 mg antibodies, dry subst., vial	480 mg
Dimethylaminophenol, 50 mg /ml, 5 ml/amp.	Adult 500 mg; child 50 - 100 mg
DMPS (Dimercaptopropane sulphonate), 100 mg/caps.	4.5 g
DMSA (Dimercaptosuccinic acid), 100 mg/caps.	2 g
Prussian blue, 0.5 g/caps.	15 g
Glycine, 50 mg/ml, dry subst., 100 ml bottle	40 g
Hydroxocobalamin, 2 x 2.5 g lyophilizate	12.5 g (to dissolve in Glucose 5%)
Labetalol, 5 mg/ml, 20 ml/amp.	200 mg
Methylene blue, 10 mg/ml, 5 ml/amp.	500 mg
Sodium thiosulfate, 100 mg/ml, 100 ml/perfusion bottle	Adult 10 - 15 g; child 5 - 10 g
Obidoxime, 250 mg/ml, 1 ml/amp.	Adult 500 mg; child 4 - 8 mg/kg
Phentolamine, 10 mg/ml, 1 ml/amp.	20 - 30 mg
Physostigmine salicylate, 1.5 mg/ml, 1 mg/ml, 1 ml/dry amp.	20 - 30 mg
Silibinin, 350 mg dry subst./vial	20 mg/kg

### 4. Replacement of antidotes

Antidotes recommended by the Swiss Toxicological Information Centre (STIC) are traditionally available at the "Apotheke Wülflingen", Winterthur, and can be ordered there directly:

C. & A. Fäh - Wunderlin, Apotheke Wülflingen, CH - 8408 Winterthur

Phone                    ++41 52 222 3279

Fax                        ++41 52 222 2479

The Swiss Toxicological Information Centre (STIC) can provide additional informations. Rarely needed antidotes can be held at the Centre, in small quantities, on demand:

Swiss Toxicological Information Centre (STIC)  
Klosbachstrasse 107, CH - 8030 Zürich

Phone ++41 1251 6666

Fax ++41 1252 8833

E-mail stic@access.ch

## 5. Special cases

### Antidotes for radionucleides

Decontaminants and antidotes for radionucleides are kept at the Zurich Cantonal Pharmacy and can be delivered to all hospitals and pharmacies when needed:

Kantonsapotheke Zürich  
Spöndlistrasse 9, CH - 8006 Zürich

Phone ++41 1255 3214 and ++41 1255 32 02

Fax ++41 1255 4546

Opening hours:

- Monday - Friday      08.00 - 12.45  
                                 13.30 - 19.00
- Saturday                09.00 - 12.45  
                                 13.30 - 17.00
- Sunday                    10.00 - 12.00

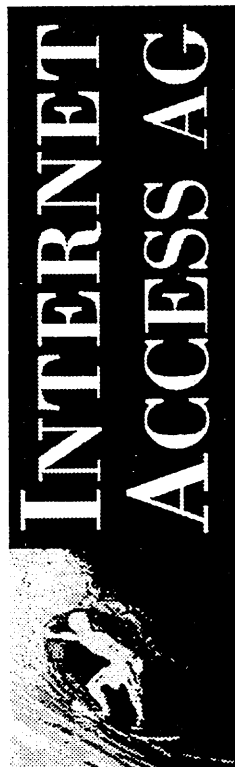
The pharmacist on duty can be reached anytime by calling the Emergency Door of the Zurich University Hospital, Phone ++41 1255 2333.

## **Antitoxin for botulism and serum for native snakes**

The botulinus antitoxin and the serum for native snakes are currently not included in the official list. Limited supplies of ViperaTab™ are held in a few hospitals (precise informations are available at the Swiss Toxicological Information Centre).

### **Collaborative Antidotes Group of the Swiss Toxicological Information Centre (STIC) and the Swiss Society of Official and Hospital Pharmacists (SSOHP):**

Dipl. pharm. C. Fäh, Dr. med. B. Gossweiler, PD Dr. pharm. S. Mühlebach, Dr. pharm. W. Pletscher, Dipl. pharm. M.-F. Poncet, Dr. med. H. Kupferschmidt (head).



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## Account

<b>Income</b>	<b>Fr.</b>
Contributions from the Cantons	1 039 395
Contribution from the Swiss Society of Chemical Industries	284 000
Contribution from the Swiss National Accident Insurance Fund	145 000
Contribution from the Swiss Association of Private Health and Accident insurances	145 000
Contribution from the Association of the Swiss Health Insurances Companies	145 000
Contributions from the Swiss Society of Pharmacists and related organizations	142 500
Contribution from the Swiss Association of Physicians	60 000
Various (mostly from private companies and individuals)	162 372
<b>Total income</b>	<b>2 123 267</b>
<b>Expenses</b>	<b>Fr.</b>
Salaries and social contributions	1 380 997
Office and administration	89 114
Office rent	126 892
Purchases, maintenance, repairs	53 493
Periodical and books	52 292
Data processing	51 012
Telephone, Telefax	34 820
Publications, annual report	16 607
Postal and bank charges	18 668
Travel expenses	21 451
Various	15 150
Accrual for moving premises	160 000
Accrual for information technology projects	60 000
Accrual for staff welfare	55 000
<b>Total expenses</b>	<b>2 135 496</b>
Excess of expenses	- 12 229

## Donations

	Fr.
Galenica Holding AG	15 000
City of Zurich	10 000
Migros culture commitment	10 000
Excom AG (Hardware)	8 600
Jubiläumsstiftung der Versicherungsgesellschaften "Zürich"-Vita-Alpina	5 000
Nestlé SA	5 000
Lever AG	3 500
Federation of the Swiss Dentists	3 000
Rentenanstalt / Swiss Life	3 000
Gösgen nuclear power plant	2 500
Association of the Swiss Department Stores	2 000
Gaba International AG	2 000
Ernst Göhner-Foundation	2 000
Merck Sharp & Dohme-Chibret AG	2 000
TA-Media AG	2 000
Unione Farmaceutica SA	1 500
Alusuisse-Lonza Holding AG	1 000
Association of the Swiss Cosmetic Industry	1 000
Association of the Swiss Soap- and Washing-powder Industry	1 000
C & A Mode AG	1 000
Crossair	1 000
Dow Europe SA	1 000
Düring AG	1 000
Federation of the Swiss Veterinary Surgeons	1 000
Hänseler AG	1 000
Jansen AG	1 000
Lardelli Alice	1 000
Roche Pharma (Switzerland) AG (contribution to the print of the annual report)	1 000
Sanitized AG	1 000
Staerkle & Nagler AG	1 000
Swiss National Insurance Company	1 000
Victorinox AG	1 000
Visura trust-company	1 000
Voigt & Co. AG	1 000
Warner-Lambert (Switzerland) AG	1 000
Paul Wirth AG	1 000

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Would you like to obtain additional informations from our centre? If so, please send us back the card below.

On this occasion we would like to ask you to critically comment our work. We thank you in advance for your suggestions.

Zurich, 1998

Swiss Toxicological Information Centre

Please send the following publications to the address below:

Remarks, suggestions

Address

Signature

The following documents are available from the Swiss Toxicological Information Centre (STIC):

- 1 Sticker with the emergency phone number
- 2 Leaflet about first aid and poisoning prevention (french, german)
- 3 Diagram about structures and activities of the STIC (engl.)
- 4 Annual report (1990, 1995, 1996 and 1997 engl.)
- 5 List of antidotes available in Switzerland (french, german)
- 6 Text on the treatment of poisoning (from Schweiz. Medizinalkalender, german)
- 7 Reprints from publications (see pp. 31-33 for ordering). These are provided on loan).

If you have any questions, please contact us.

Swiss Toxicological  
Information Centre  
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CH-8030 Zurich