

PRODTOX

A Powerful Tool for Poison Control Centre & Surveillance Users

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March 27, 2001

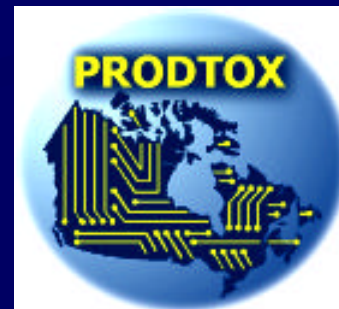
ProdTox



Presentation Outline:

- Project Background
- Poison Control Centre Tools
 - General Search
- Surveillance Tools:
 - Clinical Cases Count
 - Predefined Reports
 - Ad Hoc Queries
- Questions

A Few Statistics:



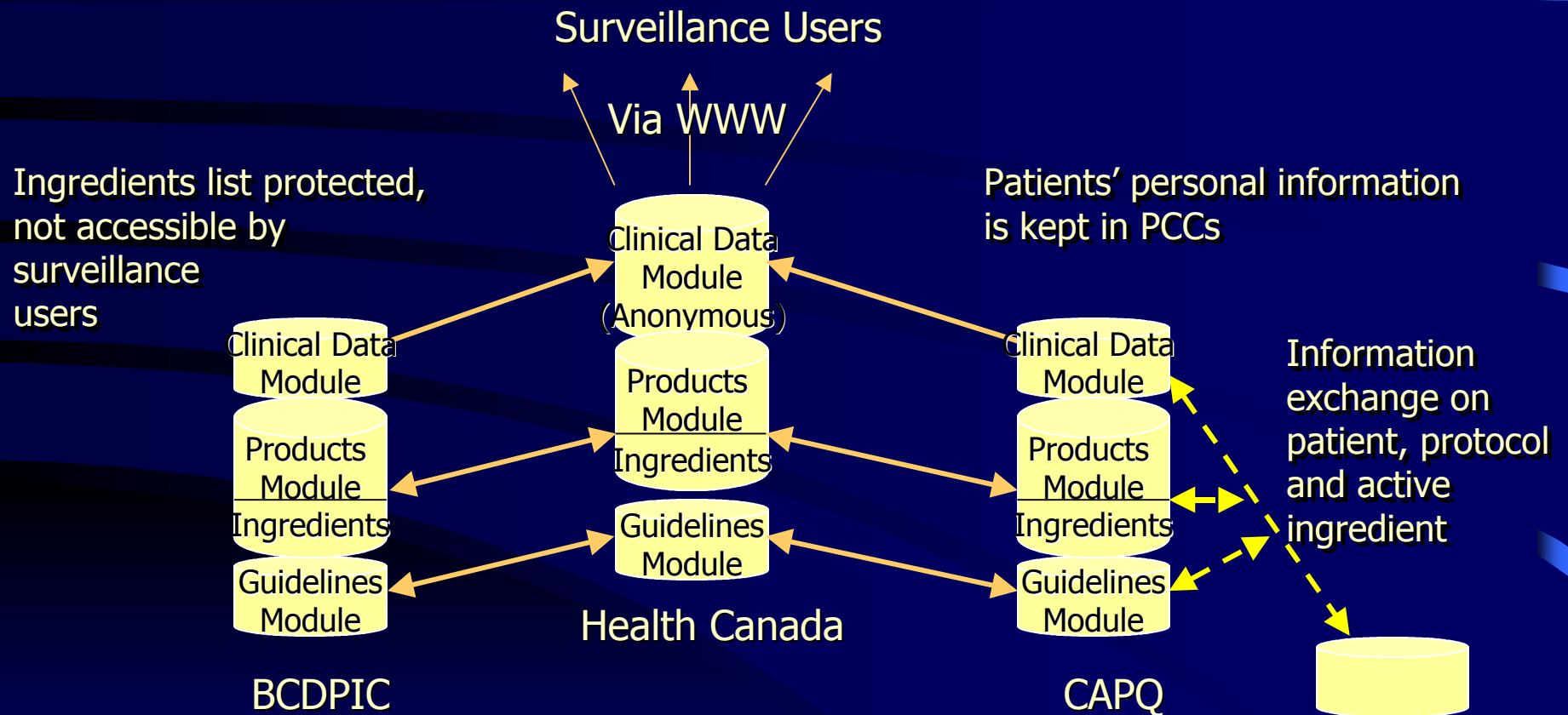
- In Canada, injuries (which includes poisonings) cost \$14.3 billion/year – it is the 3rd largest contributor to the total cost of illness (after cardiovascular and musculo-skeletal diseases);
- Unintentional poisonings is the 3rd leading cause of hospitalization for injuries for children and youth, after traffic injuries and suicide attempts; and
- Approximately 100,000 Canadian children and youth under the age of 15 fall victim to poisoning every year.



What is ProdTox?

- A Pilot web-based network being developed to monitor, prevent and reduce injury hazards in the area of poisonings;
- A Pilot web-based network linking databases of:
 - 1st - the Centre Anti-Poison du Québec (CAPQ) and the B.C. Drug and Poison Information Centre (BCDPIC); and
 - 2nd - all Canadian Poison Control Centres.

ProdTox Pilot Model



ProdTox Objectives:



Provide or improve:

- National surveillance capacity in area of intentional and unintentional poisonings;
- Evidence based decisions for regulatory and prevention programs;
- Alert system for poisoning outbreaks;
- Quality of interventions by PCCs and ERs; and
- Canadian health network (by contributing to security, privacy, IP, business intelligence tools, and other issues).



What ProdTox Is Trying To Fix (1):

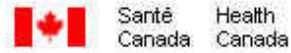
- Lack of national data on acute poisonings, resulting in inability of public health professionals to undertake surveillance activities related to regulatory, prevention and information programs;
- Little communication and exchange of knowledge/intelligence between Canadian PCCs (e.g. standardization of processes);



What ProdTox Is Trying To Fix (2):

- Lack of information on new Canadian products resulting in risks of inappropriate treatments being provided to patients suffering from acute poisonings;
- Increasing inability of PCCs (especially smaller ones) to cope with growing demands for resource-intensive quality advisory services;
- Lack of public information on acute poisonings.

A Bilingual System



Canada

Réseau des données des risques liées aux produits Product Related Risk Data Network



Déni de responsabilité :

Les données du projet pilote ProdNet ne sont utilisées que pour des fins d'évaluation seulement et ne peuvent servir à formuler des diagnostics ou à traiter des patients. Certaines de ces données sont incomplètes et n'ont pas été validées.

Français

ProdNet disclaimer:

The ProdNet Pilot data is to be used only for evaluation purposes and shall not be used for diagnosis or treatment of patients. The data has not been verified for accuracy and is incomplete.

English

ProdTox



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Canada

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ProdTox Main Menu



PCC Tools



Surveillance Tools



Discussion Forums



Alerts



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PCC TOOLS



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General Search Function

Search for Products, Ingredients, Treatment Guidelines, Therapies, and/or Manufacturers, Importers.

Enter keyword(s)

Search

Clear

The search is performed using the keyword(s) and the refined criteria for the types of search selected.

Types of search	Refined Search Criteria
<input checked="" type="checkbox"/> Product	<input type="checkbox"/> Find best match
<input checked="" type="checkbox"/> Ingredient	<input type="checkbox"/> List products by most reported first (default - alphabetical)
<input type="checkbox"/> Treatment Guideline / Therapy	<input type="checkbox"/> Search product/ingredient description
<input type="checkbox"/> Manufacturer / Importer	

[Search for products by clinical effects](#)

[Help on advanced search](#)

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Product Details



[Enlarge image](#)

Name

[brand name (English and/or French and/or Latin)]

Formula

Toxicity Legend

	Qty Min.	Qty Max.	Units
* [ingredient 1]	[x]	[x]	[units]
[treatment guideline 1] ... [treatment guideline N]			
...	[x]	[x]	[units]
@ [ingredient N]	[x]	[x]	[units]
P [product 1]	[x]	[x]	%
...	[x]	[x]	%
P [product N]	[x]	[x]	%

If applicable

Treatment Guideline

[treatment guideline]

Description

[description in English and/or French]

Manufacturer/Importer Name

* [manufacturer/importer 1] ([x] product)

...

[manufacturer/importer N] ([x] product)



Chemical and Physical Properties

[physical properties such as pH]

Registration Number

[DIN, PCP no., chemical or household no.][ex. DIN: #####,
PCP: #####] May have more than one number

Classification/Usage

[Pharmaceutical or Non-Pharmaceutical Classification Code]
May have more than one classification code.

[Usage notes]

Notes

[General notes]

Last Update

[Date when product information was last updated]

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Ingredient Details

Name

[name of ingredient]

Treatment Guideline

[\[treatment guideline 1\]](#)

...

[\[treatment guideline N\]](#)

Products

[\[x products\]](#)

CAS Number

[ingredient CAS number]

UN

[ingredient universal number]

Classification code

[Pharmaceutical or Non-Pharmaceutical Code]

Chemical and Physical Properties

[ingredient physical properties and in many cases, the chemical formula]

Notes

[general notes in English and/or French]

Last Update

[date when ingredient information was last updated]



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(Example of a treatment guideline)



Calculators

- Anion Gap
- Arterial Gas
- Osmolar Gap
- ...



ACETAMINOPHEN

[7. Pharmacotoxicology](#)

[7.1 Therapeutic doses](#)

[7.2 Toxicity](#)

[7.2.1 Toxicity of ingested dose](#)

[8. Laboratory analyses](#)

[9. Clinical effects](#)

[10. Treatment](#)

[12. References](#)

7. Pharmacotoxicology

7.1 Therapeutic doses

- children < 12 years
- P.O.: 10 - 15 mg/kg/dose Q 4-6H, maximum 5 doses/day
- rectal: 30 mg/kg/dose
- Adults
- 325-1000 mg/dose Q 4-6H, maximum 4 g/day

7.2 Toxicity

7.2.1 Toxicity of ingested dose

- Patient with normal liver
- Children: 140 mg/kg
- Adults: 7.5 g
- Patients with abnormal liver
- Children: 100 mg/kg
- Adults: 5 g



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Manufacturer/Importer Details

Manufacturer/Importer Name

[name of manufacturer or importer]

Primary Contact

[name and title of primary contact]

[phone number]

[cellular number]

[fax number]

[\[email address\]](#)

Secondary Contact

[name and title of secondary contact]

[phone number]

[cellular number]

[fax number]

[\[email address\]](#)

Address

[address of manufacturer or importer]

Products

products are stored on the ProdTox system from the manufacturer/importer that could cause a poison exposure.

Web Site

[\[web site of manufacturer/importer and/or division if available\]](#)

Last Update

[date when manufacturer/importer information was last updated]



Main Surveillance Tools

- Clinical Cases Scan
- Predefined Reports
- Ad Hoc Queries



Clinical Cases:

Clinical Case (or Poison Exposure Case) contains the following information:

- Patient Age
 - Gender
 - Reason for Exposure
 - Route of Exposure
 - Exposure Substance
 - Exposure date and time
 - Site of exposure
 - Pregnancy duration*
 - Post ingestion time
 - Chronicity
 - Clinical Effects
 - Treatment location
 - Treatment
 - Medical Outcome
 - Packaging information *
 - CAP/Province/Region /Municipality
 - Postal locator* (3 digits)
- * **Optional**

Clinical Cases Scan



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Clinical Case Scan

Scan Profile Name

Enter a scan profile name

Select scan criteria in the primary filter and/or the secondary filter.

Primary Filter Criteria	Secondary Filter
	Product
	Ingredient
	Manufacturer / Importer
	Pharmaceutical Classification
	Non-Pharmaceutical Classification

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Clinical Case Scan



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Clinical Case Scan Scan Profile


Select one or many products that match your criteria and submit to select the secondary criteria

- ATIVAN INJ 4MG/ML
- ATIVAN SUBLINGUAL TABLETS 0.5MG
- ATIVAN SUBLINGUAL TABLETS 1MG
- ATIVAN SUBLINGUAL TABLETS 2MG
- ATIVAN TAB 0.5MG DISCONTINUED
- ATIVAN TAB 0.5MG SUBL DISCONTINUED
- ATIVAN TAB 1MG DISCONTINUED
- ATIVAN TAB 1MG SUBL DISCONTINUED
- ATIVAN TAB 2MG DISCONTINUED
- ATIVAN TAB 2MG SUBL
- ATIVAN TABLETS 0.5MG
- ATIVAN TABLETS 1MG


Clinical Cases Count – Secondary Criteria



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Clinical Case Scan

Scan Profile Name

Enter a scan profile name

Select scan criteria in the primary filter and/or the secondary filter.

Primary Filter Criteria	Secondary Filter Criteria
	<input type="checkbox"/> Location
	<input type="checkbox"/> Therapy
	<input type="checkbox"/> Clinical Effect
	<input type="checkbox"/> Age
	<input type="checkbox"/> Gender
	<input type="checkbox"/> Outcome
	<input type="checkbox"/> Reason
	<input type="checkbox"/> Route

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Province
All
British Columbia
Quebec

Exposure Reason
All
Unintentional - General
Unintentional - Environmental
Unintentional - Occupational
Unintentional - Therapeutic error
Unintentional - Misuse
Unintentional - Bite/Sting
Unintentional - Food poisoning
Unintentional - Unknown
Intentional - Suspected suicide
Intentional - Misuse

Age Group
All
<= 5 yrs
6 - 12 yrs
Teen
20s
30s
40s
50s
60s
70s
80s

Gender
All
Male
Female
Unknown

Exposure Route
All
Ingestion
Inhalation
Aspiration
Ocular
Dermal
Bite
Parenteral
Otic
Rectal
Vaginal

Medical Outcome
All
No effect
Minor effect
Moderate effect
Major effect
Death
Not followed, judged as nontoxic exposure
Not followed, minimal clinical effects possible
Unable to follow, judged as a potentially toxic exposure

Year
All
1998
1999
2000

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Clinical Case Scan

Scan Profile

Scan Profile Name: [name of profile]

Scan Period From: To: (yyyy/mm/dd)

- Scan Criteria
- [Primary Filter Criteria](#)
 - [Secondary Filter Criteria](#)
 - [View Scan Profile](#)

Primary Filter

CASES:
 WHERE Prod = Valium 2 mg
 OR Prod = Valium 10 mg
 OR Ing = Diazepam
 OR Ing = Methanol
 OR Man/Imp = 3M
 OR Phar = Antiviral
 OR NonPhar = Cyanocordol
 AND Ing = Acetaminophen
 NOT Man/Imp = ACME

Secondary Filter

CASES:
 WHERE Prov/Terr = Nunavut
 OR City = Montréal
 OR Age = All
 OR Rout = Ingestion
 OR Reas = Unintentional
 OR Outc = Major effect
 AND Prov/Terr = Ontario
 AND Rout = Inhalation
 NOT Outc = Minor Effect

[Refine Filters](#)

[Get No. of Cases](#) : _____

Clinical Cases Scan - Download



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Your request for extraction has been submitted to the Secretariat. You should receive a reply via e-mail within 48 hours.

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Sample e-mail reply by Secretariat

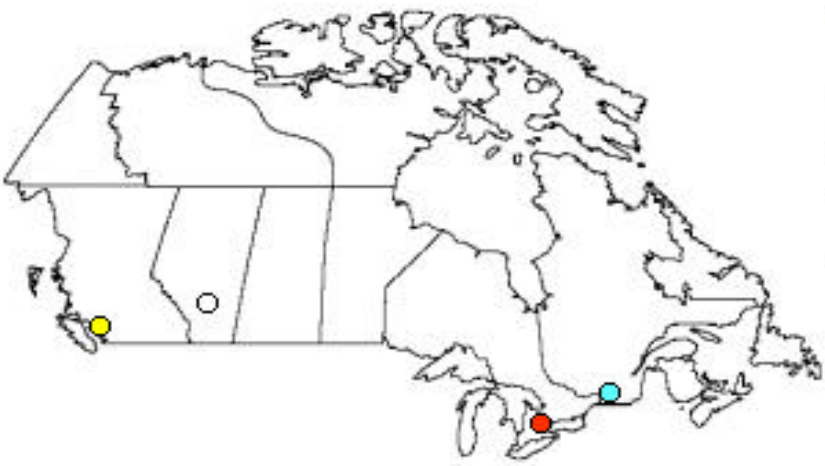
Subject: re: Request for extraction
Date: 2001/11/13 10:08:31 -0500
From: ProdTox_Secretariat@hc-sc.gc.ca
Organisation: Health Canada - [ProdTox](#) Project
To: john_doe@somewhere.ca
Your request for extraction has been accepted. You can download the file by clicking on the following URL:
[www.prodtox.net/extract/...](http://www.prodtox.net/extract/)


[ProdTox](#) Secretariat




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Geomatic Reports



Z+ 

Z- 

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Overlay 1

RHU limits

Revenues

...

Overlay 2

RHU limits

Revenues

...

Number of Cases

- < 100
- 100 ↔ 200
- 200 ↔ 300
- 300 ↔ 400
- > 400

Criteria Selected

Provinces/Territories: All; Cities: Vancouver, Calgary Toronto, Montreal; Routing: Inhalation;
Reason: Intentional ...

Predefined Reports



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Predetermined Reports

To view a report, select a report name, a province and a year and then click on View Report.

The report for the current year contains cumulative data since the beginning of the year and is regenerated at the end of each month.

All reports are generated in PDF format. If you do not have Acrobat Reader, please download the Acrobat Reader by clicking on the Acrobat icon at the bottom of this web page.

▼

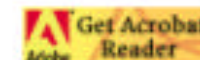
- Reason for Human Poison Exposure Cases
- Distribution of Reason for Human Poison Exposure by Age
- Therapy Provided in Human Exposure Cases
- ...

▼

- British Columbia
- Alberta
- Saskatchewan

▼

- 1999
- 1998



Health Canada - NHSI / ProdNet Pilot Project
Age and gender Distribution of Human Poison Exposure Cases

1998 Annual Report

<i>Age (yr)</i>	<i>Male</i>		<i>Female</i>		<i>Unknown</i>		<i>Total</i>		<i>Cumulative Total</i>	
	<i>No.</i>	<i>Row %</i>	<i>No.</i>	<i>Row %</i>	<i>No.</i>	<i>Row %</i>	<i>No.</i>	<i>Col %</i>	<i>No.</i>	<i>Col %</i>
<1	961	49.0	871	44.4	128	6.5	1,960	2.8	1,960	2.8
1	5,489	51.5	4,955	46.5	206	1.9	10,650	15.4	12,610	18.2
2	5,949	52.3	5,200	45.7	227	2.0	11,376	16.4	23,986	34.6
3	3,677	52.4	3,214	45.8	132	1.9	7,023	10.1	31,009	44.8
4	1,671	53.4	1,417	45.2	44	1.4	3,132	4.5	34,141	49.3
5	881	52.7	750	44.8	42	2.5	1,673	2.4	35,814	51.7
Unknown child <= 5	0	0.0	0	0.0	0	0.0	0	0.0	35,814	51.7
6-12	2,974	52.4	2,558	45.1	144	2.5	5,676	8.2	41,490	59.9
13-19	2,607	39.7	3,836	58.4	120	1.8	6,563	9.5	48,053	69.4
Unknown child	0	0.0	0	0.0	0	0.0	0	0.0	48,053	69.4
Total children (<20)	24,209	50.4	22,801	47.4	1,043	2.2	48,053	69.4	48,053	69.4
20-29	2,810	47.5	3,051	51.6	49	0.8	5,910	8.5	53,963	77.9
30-39	2,747	49.5	2,776	50.0	27	0.5	5,550	8.0	59,513	85.9
40-49	1,778	44.8	2,178	54.8	16	0.4	3,972	5.7	63,485	91.7
50-59	905	42.0	1,232	57.2	16	0.7	2,153	3.1	65,638	94.8
60-69	453	42.0	621	57.6	5	0.5	1,079	1.6	66,717	96.3
70-79	308	40.6	447	58.9	4	0.5	759	1.1	67,476	97.4
80-89	150	33.1	298	65.8	5	1.1	453	0.7	67,929	98.1
>= 90	23	28.8	52	65.0	5	6.3	80	0.1	68,009	98.2
Unknown adult	0	0.0	0	0.0	0	0.0	0	0.0	68,009	98.2
Total adults	9,174	46.0	10,655	53.4	127	0.6	19,956	28.8	68,009	98.2
Unknown age	498	39.7	691	55.1	66	5.3	1,255	1.8	69,264	100.0
Total	33,881	48.9	34,147	49.3	1,236	1.8	69,264	100.0	69,264	100.0

Ad Hoc Queries

Health Surveillance: ProdNet Java Table View

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[ProdNet Java Graph View](#)
[ProdNet HTML Table View](#)
[RETURN TO PRODNET](#)

LOCATION: All Locations
TIME: All Years
REASON: All Reasons
ROUTE: All Routes
Measure: CASES

	All Genders	Male	Female	Unknown	
▼ All Ages	183,529	89,060	92,421	2,048	
<= 5 yrs	82,478	43,454	37,811	1,213	
6 - 12 yrs	11,187	5,928	5,024	235	
13 - 19 yrs	13,296	5,395	7,721	180	
20 - 29 yrs	13,348	6,379	6,894	75	
30 - 39 yrs	12,531	6,081	6,408	42	
40 - 49 yrs	10,870	4,934	5,896	40	
50 - 59 yrs	4,973	2,171	2,780	22	
60 - 69 yrs	2,509	1,047	1,454	8	
70 - 79 yrs	1,816	710	1,098	8	
80 - 89 yrs	1,132	373	753	6	
>= 90 yrs	169	48	115	6	
Unknown Child (<=19 yrs)	1,754	958	764	32	
Unknown Adult (>=20 yrs)	25,545	10,782	14,683	80	
Unknown Age	1,921	800	1,020	101	



LOCATION

GENDER

REASON

ROUTE

Measure

All Locations

All Genders

All Reasons

All Routes

CASES

	2000	Q1 2000	JAN 2000	FEB 2000	MAR 2000	Q2 2000
▼ All Ages	20,587	16,439	6,151	5,842	4,446	4,100
<= 5 yrs	8,427	6,810	2,606	2,512	1,692	1,000
6 - 12 yrs	938	723	252	241	230	150
13 - 19 yrs	1,245	1,001	352	350	299	150
20 - 29 yrs	1,494	1,209	460	418	331	150
30 - 39 yrs	1,426	1,124	428	381	315	150
40 - 49 yrs	1,624	1,387	557	573	257	150
50 - 59 yrs	603	467	161	154	152	150
60 - 69 yrs	301	223	82	79	62	150
70 - 79 yrs	211	166	61	62	43	150
80 - 89 yrs	135	106	35	39	32	150
>= 90 yrs	21	15	3	6	6	150
Unknown Child (<=19 yrs)	243	196	77	65	54	150
Unknown Adult (>=20 yrs)	3,800	2,921	1,052	928	941	150
Unknown Age	119	91	25	34	32	150



Ad Hoc Queries



DIMENSIONS

H
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H
Y

Time	Location	Reason	Route	Gender	Age
Year	Province	Unintentional	Ingestion	Male	<= 5 yrs
Quarter	Region	General	Inhalation	Female	6 - 12 yrs
Month	City	Environmental etc.	Aspiration	Unknown	Teen
		Intentional	Ocular		20s
		Suspected suicide	Dermal		30s
		Misuse	Bite		40s
		etc.	Parenteral		50s
		Other	Otic		60s
		Contamination	Rectal		70s
		Malicious	Vaginal		80s
		Adverse reaction	Other		>= 90 yrs
		Drug	Unknown		Unkn Child (<=19 yrs)
		Food			Unkn Adult (>=20 yrs)
		etc.			Unkn Age



LOCATION

GENDER

REASON

ROUTE

Measure

All Locations

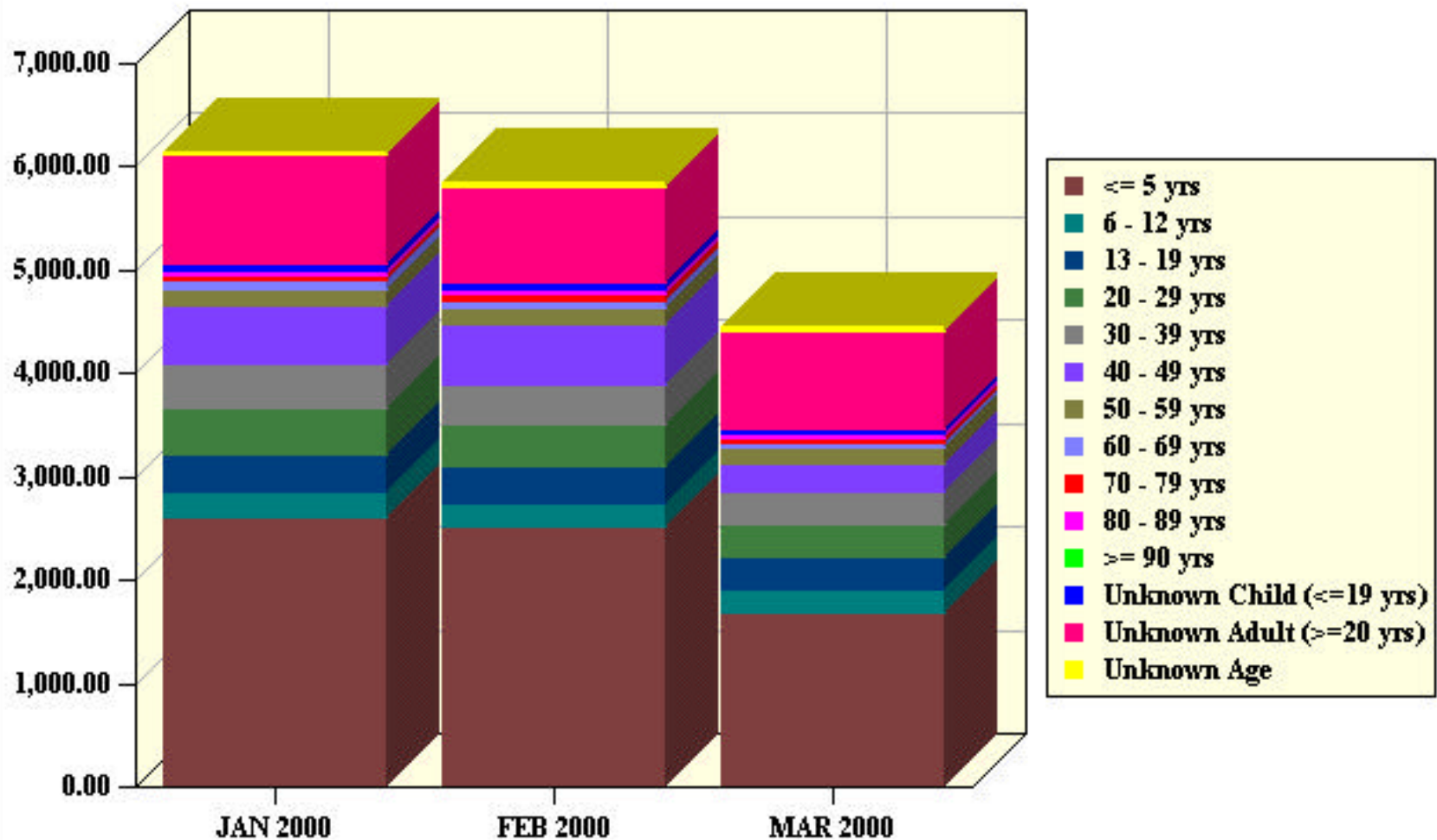
All Genders

All Reasons

All Routes

CASES

All Locations All Genders All Reasons All Routes CASES





QUESTIONS?

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