# **2022 Annual Report**

#### Centre antipoison du Québec

Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale

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#### **2022 Annual Report** Centre antipoison du Québec

Dr. Maude St-Onge, Medical Director Centre antipoison du Québec Nursing Directorate Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale

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# PRESENTATION

Since 1986, the Centre antipoison du Québec (CAPQ) has provided bilingual 24/7 telephone consultation services to the public and health professionals on cases of acute exposure to potentially toxic substances. From 2008 to 2022, the CAPQ handled an average of 47,273 cases annually. This number has, however, increased in recent years – from 47,375 in 2016 to 51,266 in 2022 (in addition to 1,282 requests for information). Among the callers, 39% were health professionals, compared to 30% the previous year. Over 87,6% of calls were answered within 30 seconds, and 2% of calls were dropped.

## **OUR MISSIONS**

The CAPQ has been tasked with the following missions:

#### **Clinical Mission**

- Offer the public and health professionals in Québec 24/7 telephone access to poison control specialists in the event of real or potential acute poisonings.
- Provide a telephone consultation service by on-call medical toxicologists to assist health professionals in the diagnosis and treatment of complex poisonings.
- Offer toxicology analyses to support centres that do not have the necessary equipment to conduct their own testing. Two laboratories have been mandated by the Ministère de la Santé et des Services sociaux (MSSS) to carry out this task.
- Participate in activities aiming to prevent and monitor acute poisonings.

#### **Teaching Mission**

- Play a leadership role in the Québec medical community by educating physicians, residents, medical professionals and paramedics on matters related to acute poisonings.
- Evaluate and improve the management of poisoned patients.

#### **Research Mission**

- Contribute to the advancement of knowledge in toxicology by developing better tools for monitoring, prevention, prognosis and treatment.
- Using an evidence-based approach, contribute to the efficient organization and delivery of health care in cases of acute poisoning.
- Develop ways to promote the effective transfer of knowledge to the public and health professionals.

#### **OUR TEAM**

Our team currently includes approximately 24 nurses trained in toxicology. Eight toxicologists have been on second call 24/7 with occasional help. A pharmacist has been supporting the CAPQ for several years and has obtained an official position as of 2022. The CAPQ also has three administrative officers.

Since 2015, Dr. Maude St-Onge has served as Medical Director of the CAPQ. Marylaine Bédard was appointed department head in May 2021. Since 2018, Guillaume Bélair has worked as assistant to the immediate superior. The former Medical Director, Dr. René Blais retired in 2022.

**Co-management team:** Marylaine Bédard (head of Service), Maude St-Onge (medical director)

Pharmacist : Audrée Elliott

#### Nursing team :

Guillaume Bélair (head's assistant), Caroline Arsenault, Violaine Ayotte, Claudia Azua-Vasquez, Dominique Bélanger, Sophie Courtemanche, Yoan De Grand'Maison, Annie Dufour, Marie-Pier Ferland, Lyne Hébert, Jean Hupé, Olivier Jacques Gagnon, Stéphanie Lachance, Joannie Leblanc, Jennyfer Leblanc, Myriam Mercier, Jolène Moreau, Émilie Patterson St-Yves, Étienne Racine, Edeline Ravenel, Michel Renaud-Therrien, Alexandre Richard, May St-Pierre, Alexandra Touloumis, Renaud Tremblay.

#### Medical team :

Maude St-Onge (medical director), Sophie Gosselin, Guillaume Lacombe, Martin Laliberté, Alexandre Larocque, Maxime Nadeau, Anne-Ericka Vermette-Marcotte, Josh Wang.

#### Administrative support team:

Joëlle Murray-Bergeron, Kpeto Koumedzina, Hélène Soucy

### **OUR SERVICES AND ACTIVITIES**

To start, with respect to the clinical services provided in response to the 51,266 actual or potential cases of acute poisoning evaluated and managed in 2022, just under one-third of patients were 0-5 years old (30%), 22% were 20 to 39 years old and 13.5% were over 60 years old.

Most cases of poisoning were unintentional (general, 51%), followed by therapeutic errors (17%), suicidal acts (15%), workplace accidents (5.5%), drug-abuse related (2.7%) and intentional misuse (2.7%). The most common route of exposure was oral (75.7%), followed by inhalation (8.4%) and ocular (5.6%). Just over half of the cases involved medications; analgesics (8,591 cases) were the most common medications encountered, followed by sedatives/hypnotics/antipsychotics (5,652 cases), antidepressants (4,522 cases) and cardiovascular drugs (2,899 cases). With regard to substances reported, household cleaners ranked first (4,721 cases), followed by cosmetics/personal care products (3,129 cases) and drugs of abuse (3,077 cases).

Data on the *surveillance of cannabis use* revealed 916 cases, including 245 accidental exposures, primarily in children. With children aged 5 or less, 65 cases were observed, 42 with children aged 6-12 years old and 244 with teenagers (13-19 years old). No deaths have been reported, but 59 patients suffered moderate to severe effects. The data on *surveillance of opioid use* found 1,162 cases, including 636 voluntary exposures (458 with suicidal intent). Unfortunately, 144 moderate to severe cases were observed and 5 deaths were recorded. Those deaths cases were not single exposures, therefore we can't conclude the deaths were directly related to opioids.

Regarding suicidal intents, a constant increase in cases has been observed (6,282 cases in 2020, 7,108 in 2021, 7,484 in 2022), especially among young people. Between 2020 and 2022, the number of cases increased from 51 to 118 in 6-12 years old, from 1,253 to 1,865 in 13-19 years old, from 1,460 to 1,800 in 20-29 years old, and also from 183 to 249 among 70-79 years old. This information as well as data from *the opioid and cannabis surveillance use* has been shared with Health Canada and the National Institute of Public Health. The Quebec

Association for the Suicide Prevention has also been informed. A more in-depth analysis of the cases is planned for 2023.

### **STATISTICS - SUICIDAL INTENTS**

|         |       |        |         |            |         | Suicid     | al inten   | ts         |         |         |      |                 |                 |       |
|---------|-------|--------|---------|------------|---------|------------|------------|------------|---------|---------|------|-----------------|-----------------|-------|
| 2020    |       |        |         |            |         |            |            |            |         |         |      |                 |                 |       |
| Age     |       | 6 à 12 | 13 à 19 | 20 à<br>29 | 30 à 39 | 40 à<br>49 | 50 à<br>59 | 60 à<br>69 | 70 à 79 | 80 à 89 | >=90 | Unknown<br><=19 | Unknown<br>>=20 |       |
| Sex     |       |        |         |            |         |            |            |            |         |         |      |                 |                 |       |
| Men     |       | 5      | 224     | 423        | 375     | 334        | 282        | 174        | 58      | 22      | 9    | 1               | 34              |       |
| Women   |       | 46     | 1 027   | 1 0 3 4    | 643     | 582        | 504        | 264        | 125     | 44      | 8    | 0               | 56              |       |
| Unknown |       | 0      | 2       | 3          | 1       | 0          | 0          | 1          | 0       | 0       | 0    | 0               | 1               |       |
|         | Total | 51     | 1 253   | 1 460      | 1 019   | 916        | 786        | 439        | 183     | 66      | 17   | 1               | 91              | 6 282 |
|         |       |        |         |            |         | 2          | 021        |            |         |         |      |                 |                 |       |
| Age     |       | 6 à 12 | 13 à 19 | 20 à<br>29 | 30 à 39 | 40 à<br>49 | 50 à<br>59 | 60 à<br>69 | 70 à 79 | 80 à 89 | >=90 | Unknown<br><=19 | Unknown<br>>=20 |       |
| Sex     |       |        |         |            |         |            |            |            |         |         |      |                 |                 |       |
| Men     |       | 8      | 270     | 433        | 349     | 316        | 307        | 159        | 88      | 29      | 10   | 2               | 41              |       |
| Women   |       | 99     | 1 604   | 1 1 37     | 647     | 596        | 518        | 227        | 115     | 38      | 7    | 2               | 94              |       |
| Unknown |       | 0      | 6       | 3          | 1       | 0          | 0          | 0          | 0       | 0       | 0    | 0               | 2               |       |
| -       | Total | 107    | 1 880   | 1 573      | 997     | 912        | 825        | 386        | 203     | 67      | 17   | 4               | 137             | 7 108 |
|         |       |        | -       |            |         | 2          | 022        | -          |         | -       | -    |                 |                 |       |
| Age     |       | 6 à 12 | 13 à 19 | 20 à<br>29 | 30 à 39 | 40 à<br>49 | 50 à<br>59 | 60 à<br>69 | 70 à 79 | 80 à 89 | >=90 | Unknown<br><=19 | Unknown<br>>=20 |       |
| Sex     |       |        | -       |            |         | -          | -          | -          |         |         |      | -               |                 |       |
| Men     |       | 13     | 269     | 472        | 373     | 329        | 266        | 200        | 103     | 29      | 2    | 1               | 49              |       |
| Women   |       | 105    | 1 585   | 1 324      | 740     | 590        | 459        | 278        | 146     | 36      | 8    | 6               | 80              |       |
| Unknown |       | 0      | 11      | 4          | 1       | 1          | 1          | 1          | 0       | 0       | 0    | 0               | 2               |       |
|         | Total | 118    | 1 865   | 1 800      | 1 114   | 920        | 726        | 479        | 249     | 65      | 10   | 7               | 131             | 7 484 |

#### **STATISTICS ON POISONNINGS**

#### Number of Case of Exposure by Type

| AGE GROUPS                             |        |        |         |         |         |         |         |         |         |         |      |                |                 |         |           |
|--|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|------|----------------|-----------------|---------|-----------|
| TYPES                                  | 0 - 5  | 6 - 12 | 13 - 19 | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60 - 69 | 70 - 79 | 80 - 89 | >=90 | Unknown<br><19 | Unknown<br>>=19 | Unknown | Total     |
| ACCIDENTAL                             |        |        |         |         |         |         |         |         |         |         |      |                |                 |         |           |
| Public health accident                 | 1      | 0      | 4       | 2       | 3       | 1       | 1       | 0       | 0       | 2       | 1    | 0              | 2               | 5       | 22        |
| Workplace accident                     | 8      | 1      | 241     | 780     | 631     | 419     | 298     | 123     | 16      | 2       | 0    | 6              | 213             | 59      | 2,797     |
| Adverse effect: food                   | 22     | 8      | 7       | 28      | 28      | 15      | 15      | 6       | 11      | 4       | 0    | 1              | 33              | 7       | 185       |
| Adverse effect: other product          | 15     | 3      | 9       | 21      | 18      | 7       | 8       | 12      | 3       | 2       | 1    | 0              | 9               | 1       | 109       |
| Adverse effect: medication             | 14     | 9      | 17      | 57      | 38      | 17      | 25      | 43      | 29      | 19      | 9    | 0              | 34              | 8       | 319       |
| Adverse effect: natural health product | 4      | 2      | 3       | 10      | 8       | 4       | 8       | 3       | 1       | 1       | 0    | 1              | 4               | 0       | <b>49</b> |
| Therapeutic error                      | 1,495  | 769    | 516     | 651     | 687     | 699     | 686     | 884     | 888     | 883     | 350  | 12             | 288             | 31      | 8,839     |
| General                                | 13,759 | 1,588  | 924     | 1,798   | 1,808   | 1,325   | 921     | 864     | 669     | 454     | 158  | 250            | 1,408           | 240     | 26,166    |
| Food poisoning                         | 43     | 7      | 11      | 39      | 29      | 14      | 12      | 21      | 4       | 2       | 1    | 1              | 56              | 7       | 247       |
| Misuse                                 | 5      | 16     | 74      | 90      | 94      | 61      | 60      | 44      | 34      | 11      | 7    | 0              | 26              | 3       | 525       |
| Bite or sting                          | 3      | 7      | 5       | 13      | 4       | 8       | 6       | 4       | 2       | 1       | 0    | 3              | 8               | 2       | 66        |
|  |        |        |         |         |         | INTE    | NTIONAL |         |         |         |      |                |                 |         |           |
| Suicidal intent                        | 3      | 118    | 1,865   | 1,800   | 1,114   | 920     | 726     | 479     | 249     | 65      | 10   | 7              | 131             | 56      | 7,543     |
| Misuse                                 | 6      | 49     | 309     | 261     | 191     | 152     | 154     | 98      | 38      | 17      | 7    | 8              | 72              | 22      | 1,384     |
| Drug abuse                             | 2      | 6      | 332     | 361     | 237     | 154     | 67      | 41      | 7       | 1       | 0    | 4              | 133             | 44      | 1,389     |
|  |        |        |         |         |         | 0       | THER    |         |         |         |      |                |                 |         |           |
| Other                                  | 20     | 8      | 22      | 28      | 27      | 20      | 16      | 17      | 20      | 10      | 8    | 1              | 30              | 5       | 232       |
| Contamination / Alteration             | 0      | 2      | 3       | 2       | 5       | 4       | 1       | 4       | 3       | 0       | 0    | 1              | 15              | 1       | 41        |
| Malicious act                          | 2      | 6      | 36      | 39      | 23      | 15      | 11      | 4       | 4       | 2       | 1    | 1              | 33              | 13      | 190       |
| Unknown                                | 33     | 25     | 146     | 156     | 140     | 135     | 138     | 115     | 85      | 44      | 16   | 5              | 78              | 47      | 1,163     |
| Total                                  | 15,435 | 2,624  | 4,524   | 6,136   | 5,085   | 3,970   | 3,153   | 2,762   | 2,063   | 1,520   | 569  | 301            | 2,573           | 551     | 51,266    |

### **Definition of Exposure Types**

|  | ACCIDENTAL  |
|--|---|
| Workplace accident                     | Any exposure occurring in the workplace or while performing one's work duties.  |
| Public health accident                 | Any environmental accident, including those related to public health. Excludes workplace accidents.   |
| Adverse effect: medication             | No overdose or contamination. The medication causes an adverse effect at therapeutic dosage.  |
| Adverse effect: natural health product | No overdose or contamination. The natural health product causes an adverse effect at therapeutic dosage.  |
| Adverse effect: food                   | No overdose or contamination. The product causes an adverse effect.<br>E.g., sulfites, monosodium glutamate (MSG), food colouring.  |
| Adverse effect: other product          | No overdose or contamination. The product causes an adverse effect with normal use.<br>E.g., dermatitis after using a cosmetic or detergent.  |
| Therapeutic error                      | Any error in the administration of a medication; error in the dosage, medication, administration route or person.   |
| General                                | Any accident excluding those not listed below.  |
| Food poisoning                         | Suspected food poisoning.   |
| Misuse                                 | Improper use of product: dosage, usage and/or administration route, without suicidal intent. (e.g., F-10 used indoors, mixing bleach and Drano, siphoning fuel, etc.).  |
|  | INTENTIONAL   |
| Suicidal intent                        | Any action aiming to harm or kill oneself.  |
| Drug abuse                             | Exposure involved in the use or abuse of alcohol, street drugs, medication for the purpose of producing a euphoric or psychotropic effect. Recreational use of a substance to induce any type of effect.  |
| Misuse                                 | Improper use of a product, medication or other: dosage, usage and/or administration route without suicidal intent but with knowledge of the consequences. The abuse of substances to induce psychotropic effects is not included. (E.g., drinking methylene blue to pass blue urine, taking large quantities of caffeine to study for exams, mixing or using more pesticides for more effective results). |
|  | OTHER   |
| Malicious act                          | Suspected malicious or criminal act: attempt to cause harm to another person by exposing them to a toxic product or an overdose. E.g., patient thinks he was poisoned by someone even if his mental state is in doubt. E.g., narcotics added to a baby's bottle to make him or her stop crying. E.g., patient exposed to a substance used for crowd control (capsicum or pepper spray).                   |
| Unknown                                | Type of exposure unknown  |
| Contamination / Alteration             | <ul> <li>Patient exposed to a substance that is contaminated or altered whether in a malicious or unintentional manner by adding to it a harmful substance.</li> <li>E.g., exposure to cocaine contaminated with levamisole.</li> <li>E.g., exposure to arsenic added to coffee machines.</li> <li>E.g., exposure to fragments of glass or metal that end up in products during manufacturing.</li> </ul> |
| Other                                  | Type of poisoning that does not fall into any of the above categories.  |

### Number of Cases of Exposure by Population Group

| Regions                            | Population 2022 | Cases  | %    |
|------------------------------------|-----------------|--------|------|
| 01 - Bas-Saint-Laurent             | 200,507         | 1,256  | 0.63 |
| 02 - Saguenay-Lac-Saint-Jean       | 282,330         | 2,042  | 0.72 |
| 03 - Capitale-Nationale            | 771,611         | 4,849  | 0.63 |
| 04 - Mauricie et Centre-du-Québec  | 540,196         | 3,589  | 0.66 |
| 05 - Estrie                        | 507,208         | 3,252  | 0.64 |
| 06 - Montréal                      | 2,038,845       | 7,709  | 0.38 |
| 07 - Outaouais                     | 408,979         | 2,127  | 0.52 |
| 8 - Abitibi-Témiscamingue          | 148,493         | 976    | 0.66 |
| 9 - Côte-Nord                      | 90,405          | 766    | 0.85 |
| 10 - Nord-du-Québec                | 15,726          | 103    | 0.65 |
| 11 - Gaspésie-Îles-de-la-Madeleine | 92,403          | 496    | 0.54 |
| 12 - Chaudière-Appalaches          | 444,072         | 2,452  | 0.55 |
| 13 - Laval                         | 446,476         | 1,681  | 0.38 |
| 14 - Lanaudière                    | 544,265         | 2,930  | 0.54 |
| 15 - Laurentides                   | 657,375         | 3,702  | 0.56 |
| 16 - Montérégie                    | 1,475,578       | 6,978  | 0.47 |
| 17 - Nunavik                       | 14,000          | 242    | 1.73 |
| 18 - Terres-Cries-de-la-Baie-James | 17,190          | 253    | 1.47 |
| Municipalité inconnue              | -               | 3      | -    |
| Région inconnue                    | -               | 785    | -    |
| Canada - Autre province            | -               | 76     | -    |
| Autre pays                         | -               | 38     | -    |
| Province inconnue                  | -               | 1      | -    |
| Inconnu                            | -               | 4960   | -    |
| Total                              | 8,695,659       | 51,266 | 0.59 |



#### Number of Cases of Exposure Based on Final Evaluation

#### **AGE GROUPS**

| EFFECTS                                   | 0 - 5  | 6 -12 | 13 - 19 | 20 - 29 | 30 - 39 | 40 - 49  | 50 - 59    | 60 - 69  | 70 - 79 | 80 - 89 | >=90 | Unknown <19 | Unknown >=19 | Unknown | Total  |
|---|--------|-------|---------|---------|---------|----------|------------|----------|---------|---------|------|-------------|--------------|---------|--------|
| Unrelated effect                          |        |       |         |         |         |          |            |          |         |         |      |             |              |         |        |
| Confirmed: no exposure                    | 63     | 5     | 11      | 12      | 9       | 8        | 7          | 5        | 3       | 3       | 2    | 0           | 1            | 1       | 130    |
| Unrelated symptoms                        | 240    | 67    | 91      | 214     | 162     | 123      | 130        | 122      | 88      | 37      | 5    | 9           | 118          | 21      | 1,427  |
| Potentially toxic or lost call            |        |       |         |         |         |          |            |          |         |         |      |             |              |         |        |
| Lost call                                 | 21     | 4     | 7       | 8       | 6       | 7        | 4          | 4        | 2       | 0       | 2    | 3           | 41           | 18      | 127    |
| Potentially toxic - Refusal of treatment  | 1      | 0     | 2       | 11      | 11      | 9        | 16         | 10       | 5       | 3       | 0    | 0           | 5            | 1       | 74     |
| Potentially toxic - Unable to follow up   | 383    | 105   | 345     | 439     | 345     | 250      | 191        | 192      | 170     | 153     | 50   | 21          | 333          | 135     | 3,112  |
|   |        |       |         |         |         | No effec | t or mino  | r effect |         |         |      |             |              |         |        |
| No effect                                 | 670    | 97    | 212     | 252     | 204     | 163      | 124        | 118      | 109     | 64      | 19   | 6           | 57           | 9       | 2,104  |
| Possibility of minor clinical effect      | 5,914  | 835   | 881     | 1,555   | 1.460   | 1,036    | 811        | 695      | 521     | 388     | 164  | 137         | 844          | 158     | 15,399 |
|   |        |       |         |         |         | Non-tox  | ic or mild | effect   |         |         |      |             |              |         |        |
| Mild effect                               | 522    | 231   | 973     | 1,256   | 1,034   | 814      | 600        | 468      | 280     | 112     | 39   | 29          | 312          | 35      | 6 705  |
| Non-toxic, no follow-up                   | 7,357  | 1,177 | 1,304   | 1,480   | 1,123   | 934      | 730        | 675      | 610     | 575     | 226  | 89          | 725          | 130     | 17,135 |
|   |        |       |         |         |         | τ        | Jnknown    |          |         |         |      |             |              |         |        |
| Potentially toxic – No follow-up criteria | 223    | 83    | 558     | 675     | 505     | 410      | 345        | 270      | 176     | 141     | 48   | 6           | 131          | 43      | 3,616  |
| End-of-life care                          | 0      | 0     | 0       | 0       | 2       | 3        | 2          | 5        | 10      | 2       | 3    | 0           | 0            | 0       | 27     |
|   |        |       |         |         |         |          | Death      |          |         |         |      |             |              |         |        |
| Death                                     | 1      | 1     | 2       | 9       | 7       | 2        | 3          | 10       | 4       | 6       | 1    | 0           | 1            | 0       | 47     |
| Death ±related (indirect)                 | 5      | 2     | 1       | 2       | 3       | 1        | 1          | 4        | 1       | 2       | 0    | 0           | 1            | 0       | 23     |
|   |        |       |         |         |         | Moderat  | e or sever | e effect |         |         |      |             |              |         |        |
| Moderate effect                           | 25     | 15    | 114     | 179     | 168     | 157      | 127        | 139      | 74      | 27      | 8    | 1           | 3            | 0       | 1,037  |
| Severe effect                             | 10     | 2     | 23      | 44      | 46      | 53       | 62         | 43       | 10      | 7       | 2    | 0           | 1            | 0       | 303    |
| Total                                     | 15,435 | 2,624 | 4,524   | 6,136   | 5,085   | 3,970    | 3,153      | 2,762    | 2,063   | 1,520   | 569  | 301         | 2,573        | 551     | 51,266 |

#### **Summary**

While a majority of cases were assessed as non-toxic or associated with only minimal or mild clinical effect, 44.6% of patients were symptomatic. In fact, 89.4 % (31,905/35,684) of the total cases were monitored at home with the advice of the CAPQ, thus avoiding a visit to the hospital. There were 14,921 cases originating from Hospitals requesting assistance.

Among the most symptomatic patients, 1,037 experienced moderate effects, 303 experienced a severe effect and 70 patients died. Despite the increase in the number of cases over the years, the number of deaths has remained relatively stable considering that 23 deaths were unrelated to the intoxication.

Of the 47 patients who died from poisoning, the majority were adults, where 10 patients aged between 60 and 69. There was also 2 adolescents, one child aged between 6-12 years old and another one aged less than 5 years old. Nearly half of the deaths were voluntary exposures (n=21) including 17 suicidal intents. Analgesics were involved in 18 cases (9 acetaminophen cases), antidepressants in 10 cases, sedative/hypnotics in 10 cases and cardiovascular drugs in 8 cases.

# **ACTIVITIES INVOLVING THE CLINICAL MISSION**

- Since early 2019, the CAPQ has had a new electronic system for patient records.
- Since June 2019, the CAPQ has had a new telephone system that has improved reporting on wait times and the number of lost calls. A special line dedicated to hospitals has been available since July 2020, allowing health care professionals to skip part of the welcome message, while giving priority to patients deemed unstable based on a triage and acuity scale for emergency departments.
- The CAPQ regularly reports incidents that might involve more than one person to public health authorities and responds to media requests on a variety of topics as a regular part of its activities such as the COP 15 in December 2022.
- The CAPQ offers expertise and information on a regular basis to media requests on various subjects (ex: cannabis, plants, organization of toxicological services, etc.)
- The CAPQ holds scientific meetings four times a year, where, among other things, cases of morbidity and mortality are reviewed and protocols are discussed as are ways to improve the care provided. Toxicologists, telephone response staff, pharmacist and, consulting pharmacists, residents on internships or in toxicological subspecialization, partners such as the toxicology laboratories of the Centre hospitalier Sainte-Justine and the Centre de toxicologie du Québec are invited to attend.
- Telephone response staff receive 15 to 30 minutes of ongoing training every two weeks to ensure their level of expertise is always up to date. Two nurses recently obtained their American Certification of Specialist in Poison Information., attended a North American Conference in toxicology shared their newfound insight with their colleagues and team members.
- With funds from the Canadian Safety and Security Program, the CAPQ has produced the Canadian Emergency Toxicology Antidote Guide in partnership with other Canadian poison control centres (https://www.ciusss-capitalenationale.gouv.qc.ca/antidotes). The bilingual guide is available on the Web and as a free downloadable mobile application. It is updated on a regular basis following the orientations of the scientific committee meeting lead by Audrée Elliott, pharmacist.
- The CAPQ has also produced a bilingual poster providing guidance on resuscitation in toxicological emergencies. Health professionals can download the poster free of charge in an 8 ½" x 11" or 24" x 32" format from the CAPQ Web section dedicated to health professionals here : <u>https://www.ciusss-capitalenationale.gouv.qc.ca/antipoison/professionnels-de-la-sante/reanimation-toxicologique</u>

In 2022, the section of the website intended for health professionals was enhanced with examples of toxicological data collection forms, podcasts intended for community pharmacists, and information on the procedure to follow for antidotes shortages.

# **ACTIVITIES INVOLVING THE TEACHING MISSION**

- In 2022, the CAPQ welcomed 40 resident physicians for a one-month internship in clinical toxicology. They came from universities across the province, whether in specialized emergency medicine, complementary emergency medicine training, intensive care (adult or pediatric), pediatrics, internal medicine, family medicine or public health.
- The CAPQ welcomed 4 residents in hospital pharmacy and a resident in community pharmacy for a one-month internship in clinical toxicology in 2022.
- The CAPQ welcomed 2 nursing interns from Laval University for an internship in community health.
- The medical toxicologists and pharmacist of the CAPQ gave lectures at professional provincial, national and international conferences on a regular basis.
- Most medical toxicologists as well as the CAPQ pharmacist contribute to the writing of scientific articles and book chapters in toxicology.
- The medical toxicologists and the CAPQ pharmacist are responsible for the majority of toxicology courses at their respective universities.
- The CAPQ collaborated to the recording of two podcasts "Éclaicir les zones grises" produced by the Faculty of Pharmacy of the University of Montreal. These two episodes are available in the *health professionals* section of the website.
- The CAPQ is currently working on a one-day toxicological training in collaboration with the Association des médecins d'urgence du Québec. This training will take place in spring 2023.
- The CAPQ has made available to health professionals 16 hours of newly updated free webinars about toxicology as well as simulated cases that can be used for continuing education credits (https://www.ciussscapitalenationale.gouv.qc.ca/antipoison/professionnels-de-la-sante/webinaires).
- For the general public, the CAPQ website (www.antipoison.ca) has been revamped and offers relevant information on first aid in case of poisoning, prevention tips, educational material and links to other resources and our partners.
- The CAPQ is currently working to develop universal visual tools for the prevention of poisoning.

# **ACTIVITIES INVOLVING THE RESEARCH MISSION**

- The CAPQ works with several public health authorities (regional and provincial) on studies involving opioids, cannabis and the surveillance of new synthetic drugs being introduced on the market.
- The CAPQ works with Health Canada and other Canadian poison control centres on a national toxico-vigilance initiative.
- Several research projects of residents in medicine are supervised by the CAPQ (e.g.: a systematic review on digoxin intoxication, etc.)
- The CAPQ participates in several other "ad hoc" projects such as the toxicity related to the ingestion of red-coated acetaminophen tablets. Some of its toxicologists are also involved in international collaborative projects such as the Clinical Toxicology Recommendations Collaborative, which issues evidence-based toxicology management recommendations. Dr Sophie Gosselin is the chair of the Collaborative.
- Two research programs endorsed by the CAPQ are currently underway: (1) " activated CHARcoal in Poisoned Patients " and (2) " CARe for Indigenous Poisoned Patients " with the contribution of a master's student in epidemiology now graduated, a master's student in public health currently in training and a PhD from Laval University who graduated in 2022 with honors. CAPQ also recently received 100,000\$ in funding from CIHR to initiate a randomized controlled clinical trial on the use of activated charcoal (CHAPP research program).

#### **CONCLUSION**

In conclusion, the CAPQ is hard at work accomplishing its clinical, teaching and research missions. In 2023, CAPQ will focus on promoting its services to the public while updating its guides. It is also planning to recruit additional response personnel, as well as trained toxicologists. A new toxicologist will join the team in 2023, while another will begin his subspecialty training. The CAPQ will continue to be a teaching environment for medical and pharmacy residents. The research mission is also continuing and will be facilitated by the implementation of the new computerized patient record system.

For any non-urgent questions not involving patient management, please contact us on the administrative phone line: 418 654-2731.

The CAPQ remains available 24/7 for both the public and the private sector for health professionals at 1 800 463-5060.

## **BIBLIOGRAPHY**

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