During this last decade, psychostimulant drugs of the phenethylamine family have gained popularity among recreational drug users. Unfortunately, no series have been yet published by any PCC about phenethylamine poisoning. We performed a retrospective study of recreational phenethylamine poisoning collected between 1st January 2007 and 31 December 2012 by the Poison Control Center (PCC) of Angers.

**PHENETHYLAMINE POISONINGS REPORTED IN A FRENCH POISON CONTROL CENTER**

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**CASES SERIES**

<table>
<thead>
<tr>
<th>Number of patients</th>
<th>Mean age</th>
<th>Sex ratio (M/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>26±9</td>
<td>3.8</td>
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<tr>
<th>Annual distribution</th>
<th>Ages and gender distribution</th>
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**IDENTIFIED PHENETHYLAMINES**

- MDMA 40%
- Methylone 13%
- Metamfetamine 13%
- Metamfetamine 13%
- Mephedrone 18%
- Methylephedrine 5%
- Other 24%

The oral route was preferred (64%). Phenethylamines were consumed with other drugs of abuse in 57% of cases (cannabis 21 cases, alcohol 16 cases, cocaine 7 cases). Search for phenethylamine was conducted in almost half of cases.

**GRAVITY AND OUTCOME**

78% patients received hospital cares and 9 patients had to be admitted in an ICU.

**SYMPTOMS**

- **CARDIOVASCULAR**
  - Tachycardia
  - Cardiac rhythm disorders
  - Cardiac arrest

- **PSYCHIATRIC**
  - Restlessness
  - Fear, anxiety
  - Hallucinations/delusion
  - Malaise
  - Drowsiness
  - Sleep disorders
  - Time and place disorientation
  - Character disorders

- **NEUROLOGICAL**
  - Headache
  - Seizures
  - Hypertonia
  - Hypoesthesia

- **OTHERS**
  - Nausea, vomiting
  - Chest pain
  - Hypertension
  - Mydriasis
  - Myosis
  - Lower abdominal pain
  - Hyperthermia 38—41°C

**TOXICOLOGY**

- AMPH: Blood (subclavian): 1700 µg/L
- Methylephedrine: Blood: methylone = 7660 µg/L
- MDMA: Blood: MDMA = 83,300 µg/L
- MDPV: Blood: MDMA = 180 µg/L
- Mephedrone: Blood: amph = 1,660 µg/L, MDA = 2,200 µg/L, and MDMA 83,300 µg/L
- Methylephedrine: Blood: amph = 1,660 µg/L, MDA = 2,200 µg/L, and MDMA 83,300 µg/L
- Mephedrone: Blood: amph = 40 µg/L (D0) then negative (D1)
- AMPH: Urines: amph = 1,640 µg/L (D1), then negative (D1)
- AMPH: Urines: amph = 8,500 µg/L (D4), 387 µg/L (D6) and 59 µg/L (D11)
- MDMA: Blood: MDMA = 180 µg/L
- MDPAV: Blood: MDMA = 180 µg/L 4
- Mephedrone: Blood: amph +
- AMPH: Urines: negative screening

**Associated drugs**

- **Outcome**
  - Death
  - Recovery
  - Sequelae

**GRAVITY AND SEVERITY SCORE**

- PSS 1: 49
- PSS 2: 17
- PSS 3: 6
- PSS 4: 4

**Although their toxicity is underestimated by consumers, exposures to phenethylamine may be severe. They are alarming because they occur in younger patients in otherwise healthy. Often it is difficult to precisely identify products during the first call because of their great diversity and variety of denominations. Physicians, toxicologists and analysts should be aware for new trends of consumption in order to better evaluate these patients.**