Problem Opioid Use and the Misuse of Opioid Analgesics in the Czech Republic

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in 2015 estimate of 46,900 problem drug users (6.68 per 1,000)
= long-term and/or regular and/or injecting use of drugs of opioid and/or amphetamine type (cocaine not included)

increase in misuse of opioid analgesics:
- fentanyl patches
- Vendal® Retard (morphine)
- Palladone® (hydromorphone)
- oxycodone

phenomenon of last years: use of synthetic drugs from the group of cathinones (Funky) or phenethylamines

Source: Národní monitorovací středisko pro drogy a závislosti (2016a)

Estimate based on multiplier method from data from low-threshold centres
Multiplier gives a share of problem drug users who are in contact with low-threshold centres among all problem drug users (=0.69 in 2016).
Problem Drug Use: Trends

FOR THE FIRST TIME decline in number of PDU and IDU

decline in number of pervitin users

increase in opioid users

Source: Národní monitorovací středisko pro drogy a závislosti (2016a)
## Estimates of PDUs in the Czech Republic

<table>
<thead>
<tr>
<th>Year</th>
<th>Problem drug users in total</th>
<th>Opioids users</th>
<th>Pervitin (methamphetamine) users</th>
<th>Injecting drug users</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Per 1,000 aged 15–64</td>
<td>Heroin</td>
<td>Buprenorphine</td>
<td>Other opioids</td>
</tr>
<tr>
<td>2006</td>
<td>30,200 4.13</td>
<td>6,200 4,300</td>
<td>-</td>
<td>10,500 1.44</td>
</tr>
<tr>
<td>2007</td>
<td>30,900 4.20</td>
<td>5,750 4,250</td>
<td>-</td>
<td>10,000 1.36</td>
</tr>
<tr>
<td>2008</td>
<td>32,500 4.39</td>
<td>6,400 4,900</td>
<td>-</td>
<td>11,300 1.52</td>
</tr>
<tr>
<td>2009</td>
<td>37,400 5.04</td>
<td>7,100 5,100</td>
<td>-</td>
<td>12,100 1.63</td>
</tr>
<tr>
<td>2010</td>
<td>39,200 5.30</td>
<td>6,000 5,000</td>
<td>-</td>
<td>11,000 1.48</td>
</tr>
<tr>
<td>2011</td>
<td>40,200 5.51</td>
<td>4,700 4,600</td>
<td>-</td>
<td>9,300 1.27</td>
</tr>
<tr>
<td>2012</td>
<td>41,300 5.71</td>
<td>4,300 6,300</td>
<td>-</td>
<td>10,600 1.47</td>
</tr>
<tr>
<td>2013</td>
<td>45,200 6.32</td>
<td>3,500 7,200</td>
<td>-</td>
<td>10,700 1.50</td>
</tr>
<tr>
<td>2014</td>
<td>47,700 6.73</td>
<td>4,100 7,200</td>
<td>-</td>
<td>11,300 1.59</td>
</tr>
<tr>
<td>2015</td>
<td>46,900 6.68</td>
<td>4,500 7,100</td>
<td>1,150</td>
<td>12,700 1.81</td>
</tr>
</tbody>
</table>

Source: Czech Annual Report on Drug Situation in 2015

43,900 injecting drug users (IDU) (approx. 90%)
Proportion of IDUs among PDUs in Treatment (TDI register), in %

Source: Czech Annual Report on Drug Situation in 2014
Before 1989: misuse of opioid analgesics, predominantly codeine and its derivates:

- **1940s**: Codeine Algena® = phenobarbital, caffeine, acetylsalicylic acid, phenacetin, aminophenazon.
- **1950s**: Alnagon® = phenobarbital, caffeine, acetylsalicylic acid, codeine = over-the-counter till 1987.
- **1980s**:
  - braun = homemade mixture of codeine and morphine derivatives made from medicines containing codeine like Alnagon®, Korynal®, Kodynal®, Ipecarin® - similar to kompot in Poland in 1980’s.
  - Injecting of analgesics was common: braun but also Alnagon® tablets crashed and dissolved in water.
- **1989**:
  - heroin – open drug scene, mainly in Prague.
- **since 1990’s**:
  - buprenorphine – also on black market - first estimate 2006 = decline in heroin use = decline in drug-related criminality.
- **since 2002**:
  - opioid analgesics like fentanyl, morphine, hydromorphone, oxycodone, codeine, dihydrocodeine, tramadol = injecting common.
methamphetamine (pervitin), buprenorphine and heroin are the main problem drugs

raw opium during Summer season

no use of desomorphine ("krokodil")

increasing misuse of opioid analgesics:
\> fentanyl patches
\> morphine-based Vendal\textsuperscript{®} Retard
\> hydromorphone-based Palladone\textsuperscript{®}
\> oxycodone-based OxyContin\textsuperscript{®}
\> Codeine-based products (codeine, dihydrocodeine)
\> tramadol

manufacture of „braun“ from codeine-based products (2 cases in recent years)

manufacture of heroin from raw opium or morphine-based products by acetylation (1 case)

new synthetic drugs: some prevalence of cathinones (Funky) but not as primary drug
no use of new synthetic opioids (e.g. Fentanyl derivates)
Regional Differences in PDU

- Methamphetamine (pervitin) spread across the Czech Republic
- Opioids in Prague and in surrounding regions + other big cities
- Opioid analgesics misuse present mainly in „opioid“ regions:
  - Prague
  - Ústecký
  - Karlovarský
  - Plzeňský
  - Jihočeský
## POUs by Regions and Coverage of OST in 2015 (Data on Officially Registered in OST)

<table>
<thead>
<tr>
<th>Region</th>
<th>Problem opioid users</th>
<th>Number of POUs per 1 OST provider</th>
<th>Proportion of POUs in OST (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heroin</td>
<td>Buprenorphine</td>
<td>Other opioids</td>
</tr>
<tr>
<td>Prague</td>
<td>3,000</td>
<td>5,300</td>
<td>400</td>
</tr>
<tr>
<td>Středočeský</td>
<td>100</td>
<td>500</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Jihočeský</td>
<td>100</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Plzeňský</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Karlovarský</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Ústecký</td>
<td>400</td>
<td>400</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Liberecký</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Královéhradecký</td>
<td>&lt;50</td>
<td>100</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Pardubický</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Vysočina</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Jihomoravský</td>
<td>600</td>
<td>&lt;50</td>
<td>100</td>
</tr>
<tr>
<td>Olomoucký</td>
<td>100</td>
<td>&lt;50</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Zlínský</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>100</td>
</tr>
<tr>
<td>Moravskoslezský</td>
<td>200</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,500</td>
<td>7,100</td>
<td>1,100</td>
</tr>
</tbody>
</table>

High number of problem use of opioid analgesics

Low availability of substitution treatment

Summary

(1) methamphetamine is dominating: approx. ¾ of estimated PDUs,
(2) buprenorphine,
(3) heroin

- substantial proportion of injecting drug users among PDUs

- recently increased misuse of opioid analgesics
  - low – but high enough to estimate

- in some regions opioid analgesics are dominating the drug scene (e.g. Plzeň) – Vendal®, Palladone®

- problem use of opioid analgesics especially in regions with traditional opioid misuse
  + in regions with limited OST coverage
Thank you

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www.drogy-info.cz
rvkpp.vlada.cz
www.vlada.cz
www.hazardni-hrani.cz

National website for support of smoking cessation:
www.koureni-zabiji.cz
National hotline for smoking cessation: 800 35 00 00

Data from National register in treatment of substance use (2015).


