CapSTAT

New Psychoactive Substances (NPS)

FEMS • MPD • DOH • DHS • DBH • OCME • DFS
1. Overview of New Psychoactive Substances
2. Role of Agencies and Response
3. Synthetic Cannabinoids
4. Synthetic Opioids
5. Challenges in addressing synthetic drugs
6. Recommendations
Overview: Synthetic Drugs

Termed “New Psychoactive Substances” by the medical community

Four types:

- **Synthetic cannabinoids** (K2 or Spice)
- **Synthetic cathinones** (Bath Salts)
- **Synthetic hallucinogens** (Cheaper forms of LSD)
- **Synthetic opioids** (Heroin laced with Fentanyl)

New psychoactive substances are psychoactive (mind-altering) substances that have become newly available on the market and are intended to copy the effects of illegal drugs.
Role of Agencies and Response

- **Emergency Response**
  - FEMS
  - MPD
  - Hospitals

- **Testing**
  - DFS
  - OCME

- **Public Health Response**
  - DOH
  - DBH
  - DHS

- **Criminal Justice system**
  - MPD
  - CJCC
  - PSA
  - Prosecutors
Synthetic Cannabinoids (K2/Spice)
## Adverse Effects of K2

### Short Term
- Panic attacks
- Psychosis
- Hallucinations
- Excited delirium
- Suicidal thoughts
- Altered perception
- Severe agitation and anxiety
- Rapid heart rate
- Violent behavior
- Glossy/rolling eyes
- Dilated pupils
- Nausea and vomiting
- Elevated blood pressure
- Acute kidney failure
- Muscle spasms, seizures, and tremors
- Overdose/death

### Long Term
- Severe potential for dependence
- No definitive research about the long term impact

*From CJCC presentation: New Psychoactive Substances*
**Demographic Breakdown of People Using K2**

<table>
<thead>
<tr>
<th>FEMS Data: Suspected encounters in June 2015</th>
<th>DBH Data: Self reported on intake forms; limited to Medicaid and uninsured</th>
<th>Emergency Department Data: Collected for 52 weeks, starting in July 2015 from 9 area hospitals. OCME testing ended in August 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEMS suspected K2 patients</strong></td>
<td><strong>DBH intake</strong></td>
<td><strong>Emergency Department K2 Testing (OCME/DOH)</strong></td>
</tr>
</tbody>
</table>
| Age range: 14 to 76  
Average age: 39  
Median age: 37 | 6% youth under 18  
94% adults | 5% youth under 18  
58% between 19-45  
19% over the age of 45  
15% unknown |
| 83% Male  
17% Female | 50% Male  
49% Female | 75% Male  
15% Female  
9% Unknown |
| Not collected | 81% Black  
7% White  
11% Unknown | 67% Black  
2% White  
3% Hispanic  
26% Unknown |
EMS Transports: Suspected Cannabinoids

Data source: FEMS
Number of EMS Transports for suspected K2

Data source: FEMS
Suspected K2 Transports by Day since 7/1/2016

Data source: FEMS
Samples provided by hospitals for patients suspected of synthetic drug use.

Not every week had samples to be tested – may not have been samples or hospital may not have sent them to OCME.

Data source: OCME
Surrounding jurisdictions have not seen as much of an increase in synthetic cannabinoids as DC.

Other drugs, such as heroin, are more significant problems in those jurisdictions.

Other jurisdictions (outside of the DC Metro Area) that are experiencing similar issues with K2 include:

- Syracuse, NY;
- Austin, TX;
- New York City;
- and Anchorage, AK
Maps of Synthetic Cannabinoid Transports

Geographic information on suspected synthetic cannabinoid transports from January to August 2016.

Data source: FEMS
Since the Sale of Synthetic Drugs Emergency Amendment Act of 2015, the sale of synthetic cannabinoids has moved from stores to the streets. The current standards for prosecution are very high; police and prosecutors need to prove that the person selling the substance knew it was banned.

The Synthetics Abatement and Full Enforcement Drug Control Act (“SAFE DC”) strengthened law enforcements ability to test for and prosecute cases against distributors of these substances.

In July 2015, Pretrial Services conducted a wide scale, non-targeted testing of 136 individuals arrested for violent crimes.

• Of those 136, 20% tested positive for synthetics
• 44% of arrestees for Assault on a Police Officer tested positive for synthetics and
• 36% of arrestees for robbery tested positive for synthetics
Synthetic Opioids
Adverse Effects of Synthetic Opioids

Immediate

- Nausea and vomiting
- Constipation
- Confusion
- Respiratory compromise, causing death

Long Term

- Infections
- Damage to the heart
- Depression
- Risk of infectious disease from shared needles

From CJCC presentation: New Psychoactive Substances
### Demographic Breakdown of People Using Opioids

<table>
<thead>
<tr>
<th>FEMS Data:</th>
<th>DOH Hospital ED Discharge Data</th>
<th>OCME Post Mortem Toxicology Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEMS Narcan Administration</strong>*</td>
<td><strong>&lt;20: 0.3%</strong></td>
<td><strong>&lt;20: 0.3%</strong></td>
</tr>
<tr>
<td>97 patients responsive to Narcan administration between 5/30-8/2/2015</td>
<td><strong>20-29: 5.0%</strong></td>
<td><strong>20-29: 7.2%</strong></td>
</tr>
<tr>
<td><strong>DOH Data:</strong></td>
<td><strong>30-39: 13.5%</strong></td>
<td><strong>30-39: 11%</strong></td>
</tr>
<tr>
<td>Hospital Discharge Data from 7 acute care hospitals from 7/2015-8/2016</td>
<td><strong>40-49: 16.3%</strong></td>
<td><strong>40-49: 19.3%</strong></td>
</tr>
<tr>
<td><strong>OCME Toxicology Tests:</strong></td>
<td><strong>50-59: 37.3%</strong></td>
<td><strong>50-59: 40.3%</strong></td>
</tr>
<tr>
<td>Post mortem toxicology tests in 2014-2016</td>
<td><strong>60-69: 25.8%</strong></td>
<td><strong>60-69: 19.3%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>70+: 1.8%</strong></td>
<td><strong>70+: 2.4%</strong></td>
</tr>
<tr>
<td><strong>Age range:</strong> 19-68</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Median Age:</strong> 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>81% Male</strong></td>
<td><strong>73% Male</strong></td>
<td><strong>72% Male</strong></td>
</tr>
<tr>
<td><strong>19% Female</strong></td>
<td><strong>27% Female</strong></td>
<td><strong>28% Female</strong></td>
</tr>
<tr>
<td><strong>82% Black</strong></td>
<td><strong>Not collected</strong></td>
<td><strong>76.2% Black</strong></td>
</tr>
<tr>
<td><strong>15% White</strong></td>
<td></td>
<td><strong>21.7% White</strong></td>
</tr>
<tr>
<td><strong>3% Hispanic</strong></td>
<td></td>
<td><strong>1% Hispanic</strong></td>
</tr>
</tbody>
</table>

*97 patients were identified as frequent users – these users generated 1,032 DC EMS responses in the past 10 years, with an average of 10/pp, and a high of 92 transports for one person
Narcan is given to patients with altered mental status, or coma of unknown origin, with the goal of reversing a possible opiate/opioid overdose. Not all patients who receive Narcan have actually overdosed on opiates/opioids.

DOH Hospital ED Discharge Data relies on receiving data from hospitals. Increase in July correlates with the increase in overall discharge data received.

Data source: DOH & FEMS

Data reflects all opioid usage, not just synthetics.
Synthetic opioid deaths may reflect overdose on a combination of substances, including non synthetic opioids.

Orange line reflects those deaths that involved synthetic opioids and those that did not involve synthetics.

Data source: OCME
Challenges addressing Synthetic Drugs

Emergency Response:
• High call volume putting strain on emergency response system (MPD and FEMS)
• Excited delirium requires magnified response and increases the risk of in custody deaths

Testing:
• Regularly changing compounds in the drugs make them hard to identify
• Current access to samples for testing what the newest compounds are in the District
• Purchasing samples for testing purposes requires companies to be licensed by the DOH and there is therefore limited access to purchasing small amounts of substances
• DFS capability on line but not fully resourced or accredited

Public Health
• Challenges accessing and analyzing reliable data
• Data collected through DBH is self reported, and intake forms don’t include synthetics as an option
• Usage of K2 among individuals who are experiencing homelessness
• Both substances are highly addictive and can lead to dependence – repeat users are driving emergency response
Recommendations

Law Enforcement:
- Continue to elevate the issues around new psychoactive substances to the national level

Emergency Response:
- Launch Excited Delirium protocol with FEMS and MPD
- Continue to work with USAO to try to move prosecutions forward
- Target outreach to those known to be at risk of K2 or opioid overdoses; consider expanding the Screening, Brief Intervention, and Referral to Treatment (SBIRT) program to intervene in high risk cases

Testing:
- Developing methods for testing compounds is resource intensive; consider additional resources and staffing to keep current with demand and updated substances
- Consider identifying changes to regulations on the sale of reference standards for testing purposes, which currently have limited availability. Companies must be licensed through the DC DOH, even to sell small amounts of substances. Consider separate classifications for research vs. hospitals or medical needs
- DFS pursue accreditation

Public Health:
- Create a comprehensive drug overdose surveillance system. Analyze for changing trends and demographics of users; meet regularly to review data
- Use reported data to implement disease intervention strategies, such as contact investigations, to identify high risk areas and clients
- Expand access to Narcan / Nolaxone; work with primary care physicians, needle exchange facilities, and DHCF to expand access and use
- Increase partnerships between DHS and DBH to reach the population that is experiencing homelessness with drug awareness, including daytime programming
- Continue providing targeted outreach to high risk communities using DBH’s Mobile Access and Referral Center (MARC) van
- Expand access to Medication Assisted Treatments (MAT)
- Increase collaboration with the DC Courts to address the needs of youth involved in the Balanced and Restorative Justice (BARJ) program and other Juvenile Competency Restoration programs
- Explore opportunity to collaborate with DHCF on development and implementation of Screening, Brief Intervention, and Referral to Treatment (SBIRT) reimbursement codes
- Continued implementation of educational initiatives in collaboration with local (DBH funded) Prevention Centers to provide information to school and community settings (primary prevention), as well as health care providers
Appendix
Program goal: locate, offer, and complete a voluntary Screening, Brief Intervention, and Referral to Treatment (SBIRT) within seven days of the overdose event.

SBIRT Outcomes:
Overall contact success rate: 39 out of 84 contacted (46 %)
5 out of 84 (6%): Incarcerated/Fugitive
40 out of 84 (48%): Client could not be found
7 out of 84 (8%): Client declined service
11 out of 84 (13%): SBIRT completed, client declined verbal commitment
13 out of 84 (16%): SBIRT completed, client verbally commits to action plan
8 out of 84 (10%): SBIRT completed, client requested transport for service
In peak periods, FEMS can transport more than 30 people a day, suspected on being on K2. Even in non peak periods, since 2015, there has been only one month which had days with 0 transports.