Lessons Learned From “High” Usage States

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Impaired Driving in Washington State

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POLY-DRUG DRIVING RISING IN FATAL CRASHES


- THC Only
- Alcohol Only
- One Drug Only (not Alcohol or THC)
- Poly-Drug (Any combination of the other categories)
Washington State Patrol - Toxicology Lab
Blood Sample Submissions for DUI Investigation

Number of Sample Submissions

Percent Sample Positive for THC

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Sample Submissions</th>
<th>Percent Sample Positive for THC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4,809</td>
<td>18.2%</td>
</tr>
<tr>
<td>2010</td>
<td>5,012</td>
<td>19.4%</td>
</tr>
<tr>
<td>2011</td>
<td>5,132</td>
<td>20.2%</td>
</tr>
<tr>
<td>2012</td>
<td>5,298</td>
<td>18.6%</td>
</tr>
<tr>
<td>2013</td>
<td>5,468</td>
<td>24.9%</td>
</tr>
<tr>
<td>2014</td>
<td>6,270</td>
<td>28.0%</td>
</tr>
<tr>
<td>2015</td>
<td>7,042</td>
<td>32.8%</td>
</tr>
<tr>
<td>2016</td>
<td>8,462</td>
<td>33.6%</td>
</tr>
<tr>
<td>2017</td>
<td>9,386</td>
<td>33.7%</td>
</tr>
</tbody>
</table>
ALCOHOL AND POLY-DRUG USE IN FATAL CRASH INVOLVED DRIVERS, 2008-2017

- Alcohol Only: 36%
- THC Only: 7%
- One Drug Only (not Alcohol or THC): 12%
- Poly-Drug (Any combination of the other categories): 45%

TARGET ZERO
Crash Factors of Drivers by Alcohol and Drug Results, 2008-2016

- Speeding
- Distracted
- Unlicensed
- Unrestrained
- Fail-to-Yield

THC Only: 30.5%, 25.2%, 23.1%, 20.5%, 4.2%
Alcohol Only: 54.2%, 45.3%, 26.3%, 39.5%, 36.9%
One Drug Only (not Alcohol or THC): 25.2%, 22.8%, 22.5%, 22.5%, 9.8%
Poly-Drug (Any combination of the other categories): 26.3%, 22.5%, 14.4%, 13.8%, 4.0%
<table>
<thead>
<tr>
<th>BLOOD ALCOHOL CONCENTRATION (BAC)</th>
<th>TYPICAL EFFECTS</th>
<th>PREDICTABLE EFFECTS ON DRIVING</th>
</tr>
</thead>
</table>
| .02%                            | ▶ Some loss of judgment  
▶ Relaxation  
▶ Slight body warmth  
▶ Altered mood | ▶ Decline in visual functions (rapid tracking of a moving target)  
▶ Decline in ability to perform two tasks at the same time (divided attention) |
| .05%                            | ▶ Exaggerated behavior  
▶ May have loss of small-muscle control (e.g., focusing your eyes)  
▶ Impaired judgment  
▶ Usually good feeling  
▶ Lowered alertness  
▶ Release of inhibition | ▶ Reduced coordination  
▶ Reduced ability to track moving objects  
▶ Difficulty steering  
▶ Reduced response to emergency driving situations |
| .08%                            | ▶ Muscle coordination becomes poor (e.g., balance, speech, vision, reaction time, and hearing)  
▶ Harder to detect danger  
▶ Judgment, self-control, reasoning, and memory are impaired | ▶ Concentration  
▶ Short-term memory loss  
▶ Speed control  
▶ Reduced information processing capability (e.g., signal detection, visual search)  
▶ Impaired perception |
| .10%                            | ▶ Clear deterioration of reaction time and control  
▶ Slurred speech, poor coordination, and slowed thinking | ▶ Reduced ability to maintain lane position and brake appropriately |
| .15%                            | ▶ Far less muscle control than normal  
▶ Vomiting may occur (unless this level is reached slowly or a person has developed a tolerance for alcohol)  
▶ Major loss of balance | ▶ Substantial impairment in vehicle control, attention to driving task, and in necessary visual and auditory information processing |

*Information in this table shows the BAC level at which the effect usually is first observed, and has been gathered from a variety of sources including the National Highway Traffic Safety Administration, the National Institute on Alcohol Abuse and Alcoholism, the American Medical Association, the National Commission Against Drunk Driving, and http://www.webMD.com.*
# Drug Categories and Their Common Effects

## CNS DEPRESSANTS
- Alcohol
- Valium
- Prozac
- Xanax
- Soma
- Rohypnol (roofies)
- GHB

## CNS STIMULANTS
- Cocaine
- Crack
- Methamphetamine
- Adderall
- Ritalin
- Dextroamphetamine
- MDPV (bath salts)

## HALLUCINOGENS
- LSD (acid)
- MDMA (ecstasy)
- Peyote
- Psilocybin
- Mushrooms

## DISASSOCIATIVE ANESTHETICS
- PCP
- Ketamine
- DXM (cough medicine)

## NARCOTIC ANALGESICS
- Heroin
- Hydrocodone
- Vichodine
- Morphine
- Oxycodone
- Percodan
- Methadone

## INHALANTS
- Solvents (gasoline, paint thinner, cleaning fluid, model glue)
- Aerosols (spray cans)
- Anesthetic gases (chloroform, whipped cream spray cans, nitrous oxide)

## PUPIL SIZE
- Normal
- Dilated

## REACTION TO LIGHT
- Slow
- Normal
- Up
- Rigid
- Restlessness
- Body tremors
- Excitement
- Euphoria
- Talkative
- Exaggerated reflexes
- Anxiety
- Redness to nasal area
- Runny nose
- Loss of appetite
- Increased alertness
- Dry mouth
- Irritability
- Grinding teeth

## MUSCLE TONE
- Flaccid

## OTHER INDICATORS
- Users will not typically show all indicators
- Euphoria
- Depression
- Laughing/crying for no reason
- Reduced ability to divide attention
- Disoriented
- Sluggish
- Thick, slurred speech
- Drunk-like behavior
- Droopy eyes
- Fumbling
- Relaxed inhibitions
- Slowed reflexes
- Uncoordinated
- Drowsy

## INHALANTS
- Marijuana
- Hash
- Hash oil
- Marinol
- Dronabinol
- K2
- Spice

## CANNABIS
- Normal
- Dilated

## POLY DRUG USE
The use of two or more drugs of different categories will cause the body to display a combination of effects. This is because each drug works independently. The results of poly drug use may be unpredictable but will generally show some indicators of each drug used. Alcohol and cannabis are the most common mixers with other drugs.
ROAD SIDE STRATEGIES

- Electronic DUI packet
- Electronic Search Warrants
- Forensic Phlebotomy
  - Lakewood PD/Pierce County SO
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Lessons Learned From “High” Usage States

Sergeant Dominic Sottile
Virginia State Police
Toxicology

• Top 10 Drugs Identified in 2012
  1. THC (and other MJ related)
  2. Alprazolam
  3. Oxycodone
  4. Diazepam/Nordiazepam
  5. Hydrocodone
  6. Benzoylecgonine (cocaine metabolite)
  7. Zolpidem
  8. Carisoprodol/Meprobamate
  9. Clonazepam
  10. Methadone

• Top 10 Drugs Identified in 2018
  1. THC (and other MJ related)
  2. Alprazolam
  3. Methamphetamine/Amphetamine
  4. Benzoylecgonine (cocaine metabolite)
  5. Fentanyl
  6. Morphine
  7. Buprenorphine/Norbuprenorphine
  8. Clonazepam
  9. Oxycodone
  10. Diazepam/Nordiazepam
Toxicology

Changing landscape since 2012:
- Increased: fentanyls, amphetamine, cocaine
- Decreased: benzodiazepines
- Consistent: marijuana related
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Dominic Sottille, Sergeant, Virginia State Police

Moderator: Kalyn Hill, Senior Policy Analyst, NGA Homeland Security and Public Safety