



Impaired Driving Trends in Montana

SCOTT LARSON, ADMINISTRATOR
FORENSIC SCIENCE DIVISION AND
STATE MEDICAL EXAMINER'S OFFICE
OCTOBER 11, 2018

2018 FSD Goals: Impaired Driving

- **Replace Breath Instrumentation**
- **Updating instrumentation technology**
- **Continue transfer of analytical methods onto LC/MS/MS platform**
- **Annual Report**

2019 FSD Goals: Impaired Driving

- **Continue transfer of analytical methods onto LC/MS/MS platform**
- **Increase outreach to clients**
- **Annual Report**
- **Develop and execute a study expanding drug testing on all DUID cases**
 - **Goal is to determine precedence of drug use in cases with an ethanol >0.1 g/100mL**
 - **Will use study to set future policy**



Quarterly Reports are available by request at DOJTOX@mt.gov

Drug Prevalence in Driver Blood Samples

(January 1, 2018 – March 31, 2018)

Statewide Statistics

Blood Samples Submitted: 851

Blood Samples Positive for Alcohol: 76%

Blood Samples Positive for Drug(s) other than Alcohol: 26%

Alcohol Detected Only*: 69%

Alcohol + Drug(s)*: 6%

Drug(s) Detected Only: 19%

No Drug(s) or Alcohol Detected: 4%

BAC Greater than 0.100%*: 69%

BAC 0.020% - 0.100%: 7%

Average BAC: 0.190, Range: 0.021 – 0.447

Most detected Drugs*

1. THC – 11% of all samples (Avg = 7.9ng/mL, Range: 1.0–35ng/mL, 160ng/mL removed for statistics)
2. Methamphetamine – 11% of all samples (Avg = 0.344 mg/L, Range: 0.022-2.2mg/L)
3. Lorazepam (Ativan) – 2% of all samples (Avg = 43 ng/mL, Range: 11-119 ng/mL)
4. Alprazolam (Xanax) – 1% of all samples (Avg = 0.090 mg/L, Range: 0.022-0.230 mg/L)
5. Morphine – 1% of all samples (Avg = 0.041, Range: 0.020-0.52 mg/L)

DRE Evaluations Performed: 55

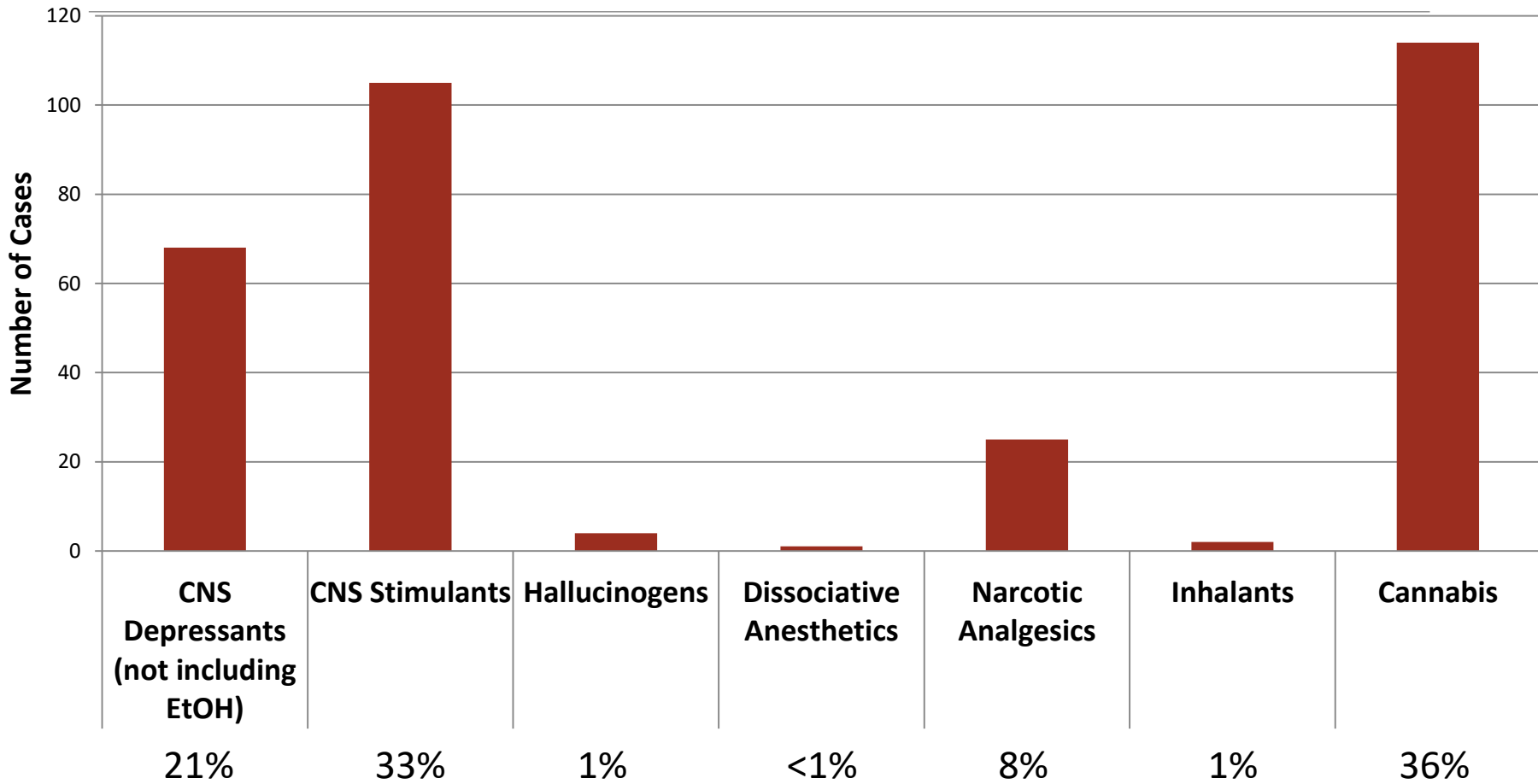
*Drug testing is not routinely administered for cases with a BAC above 0.10

Turn-Around Time

<u>Type of Case</u>	<u>Median</u>			<u>95% of cases completed in this timeframe</u>		
	2016	2017	2018 (Thru Aug.)	2016	2017	2018(Thru Aug.)
DUI Drugs	53 Days	43	42	75 Days	90	68
DUI Ethanol	22 Days	15	16	35 Days	25	26

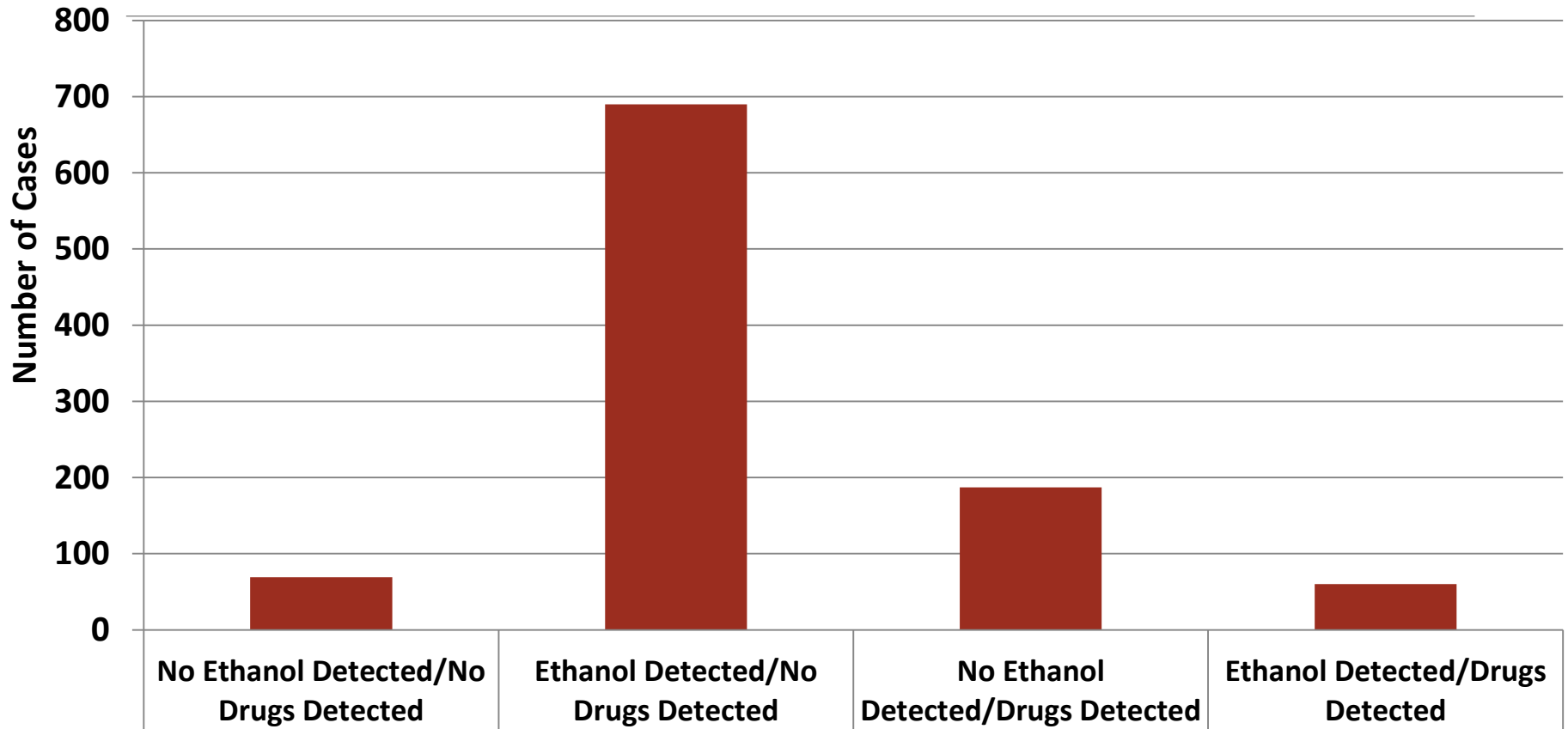
DRE Cases

2017 DRE: Drug Category Breakdown

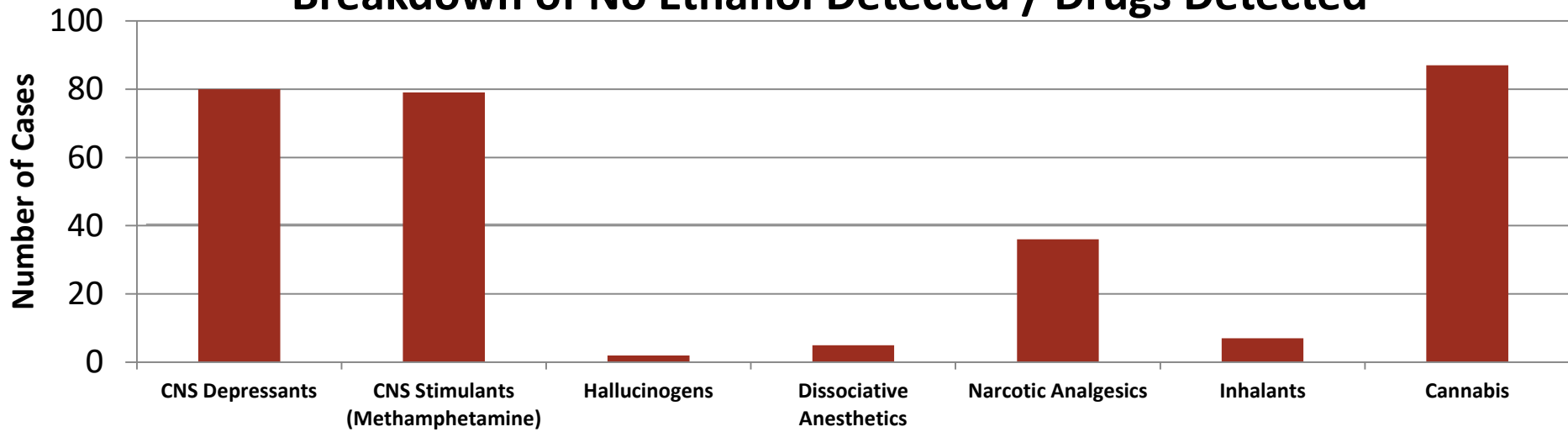


Vehicle Crash: Toxicology

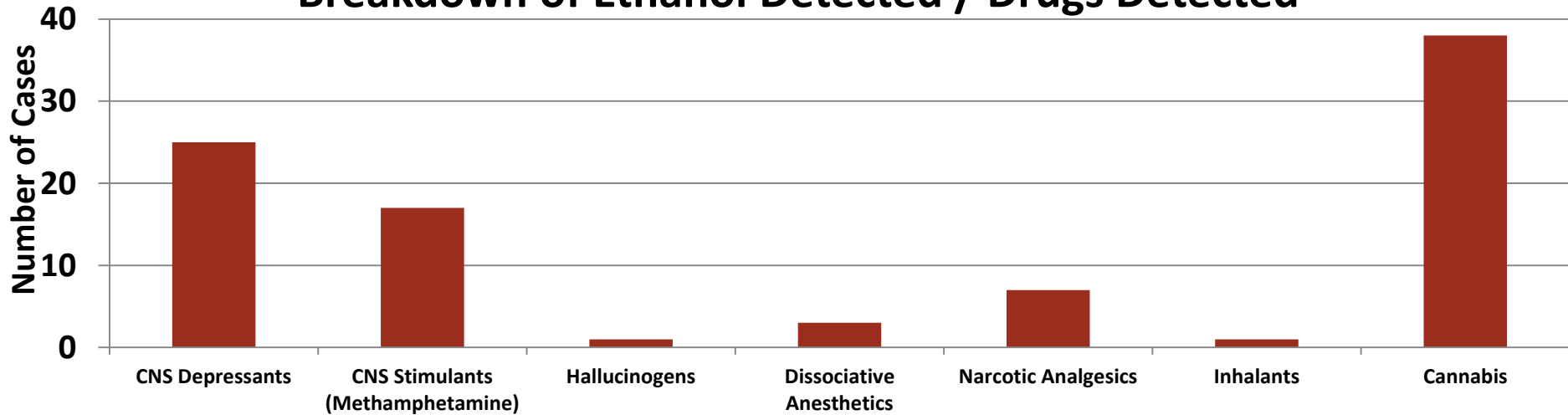
Vehicle Crash: Toxicology Results



Breakdown of No Ethanol Detected / Drugs Detected

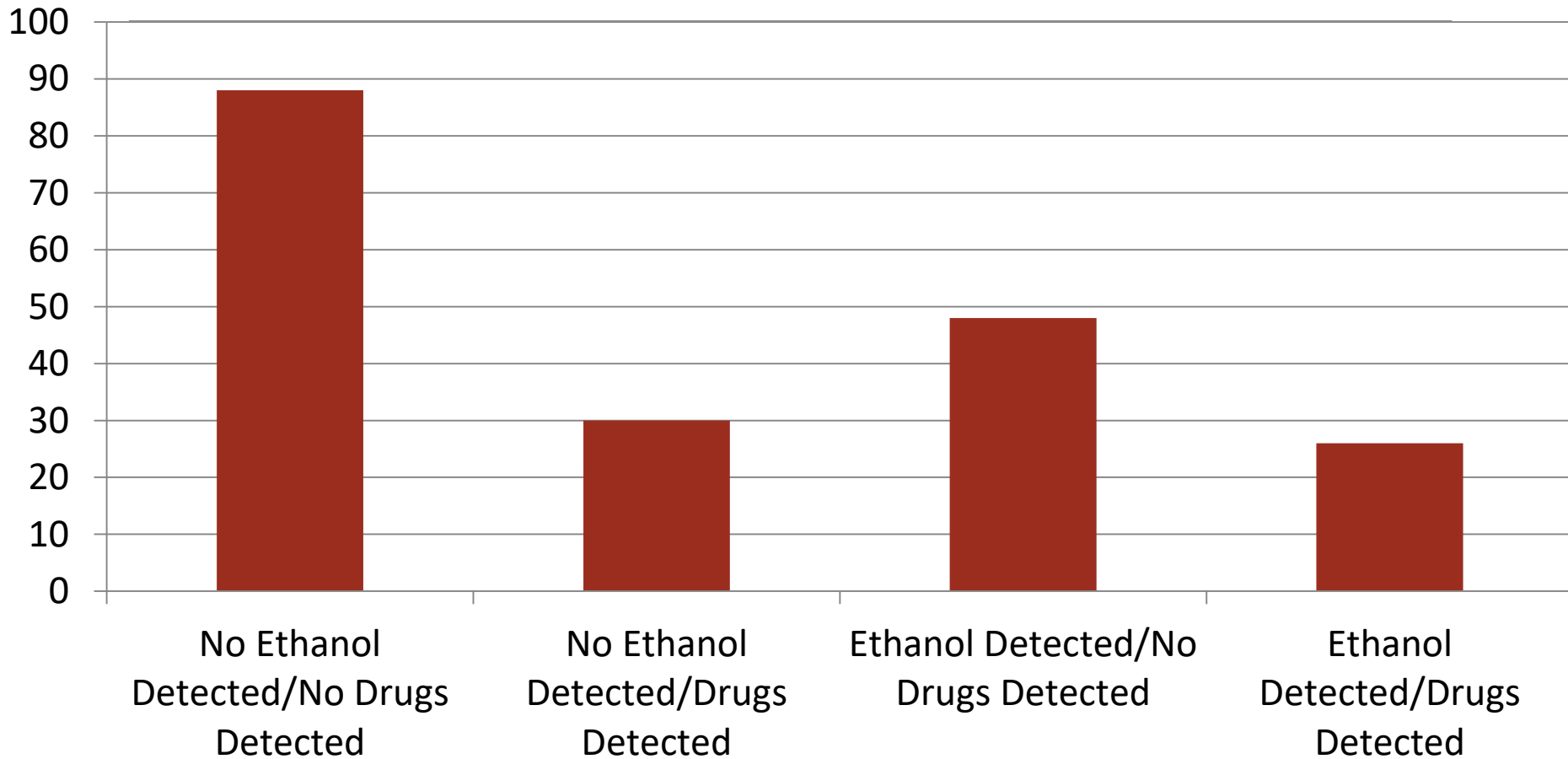


Breakdown of Ethanol Detected / Drugs Detected

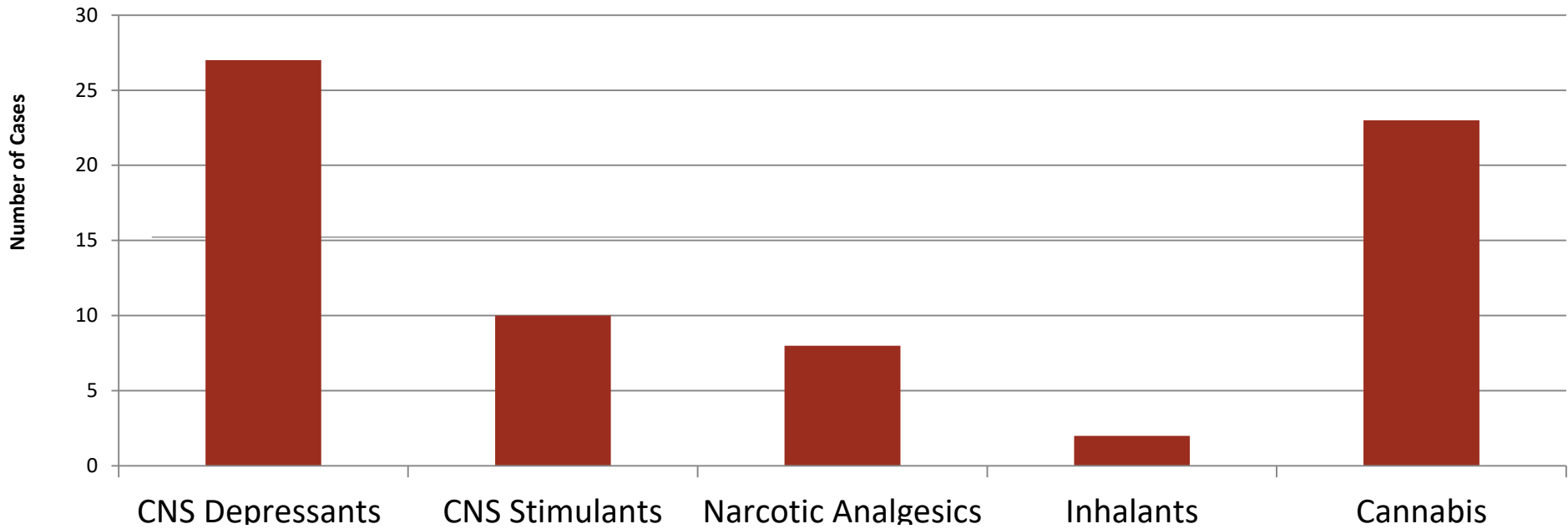


Traffic Fatality: Toxicology

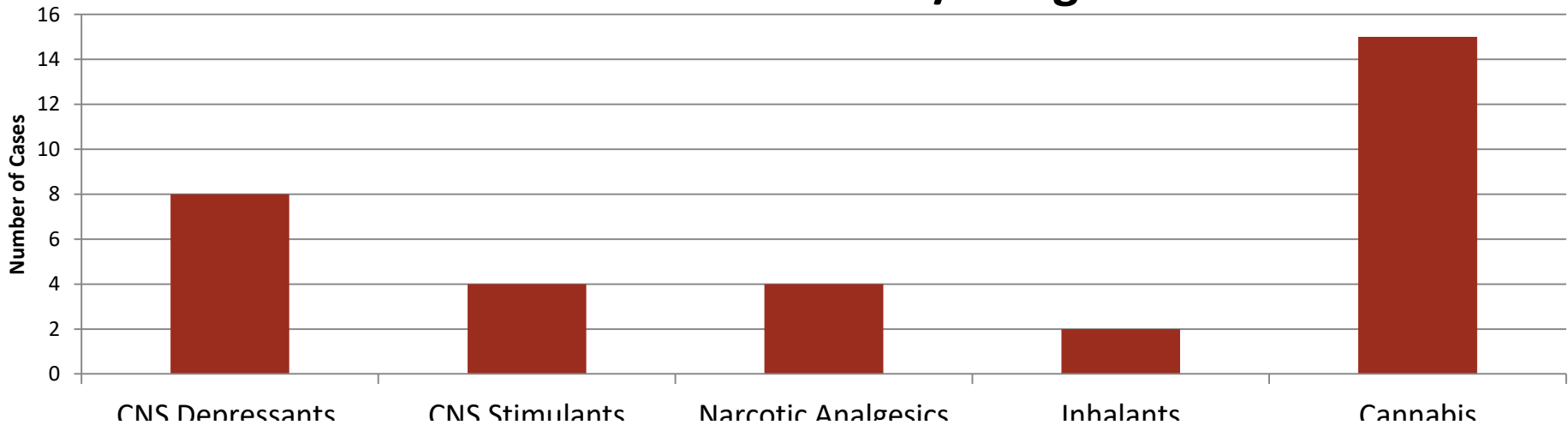
Traffic Fatality Results (N=207)



Breakdown of No Ethanol/ Drugs Confirmed

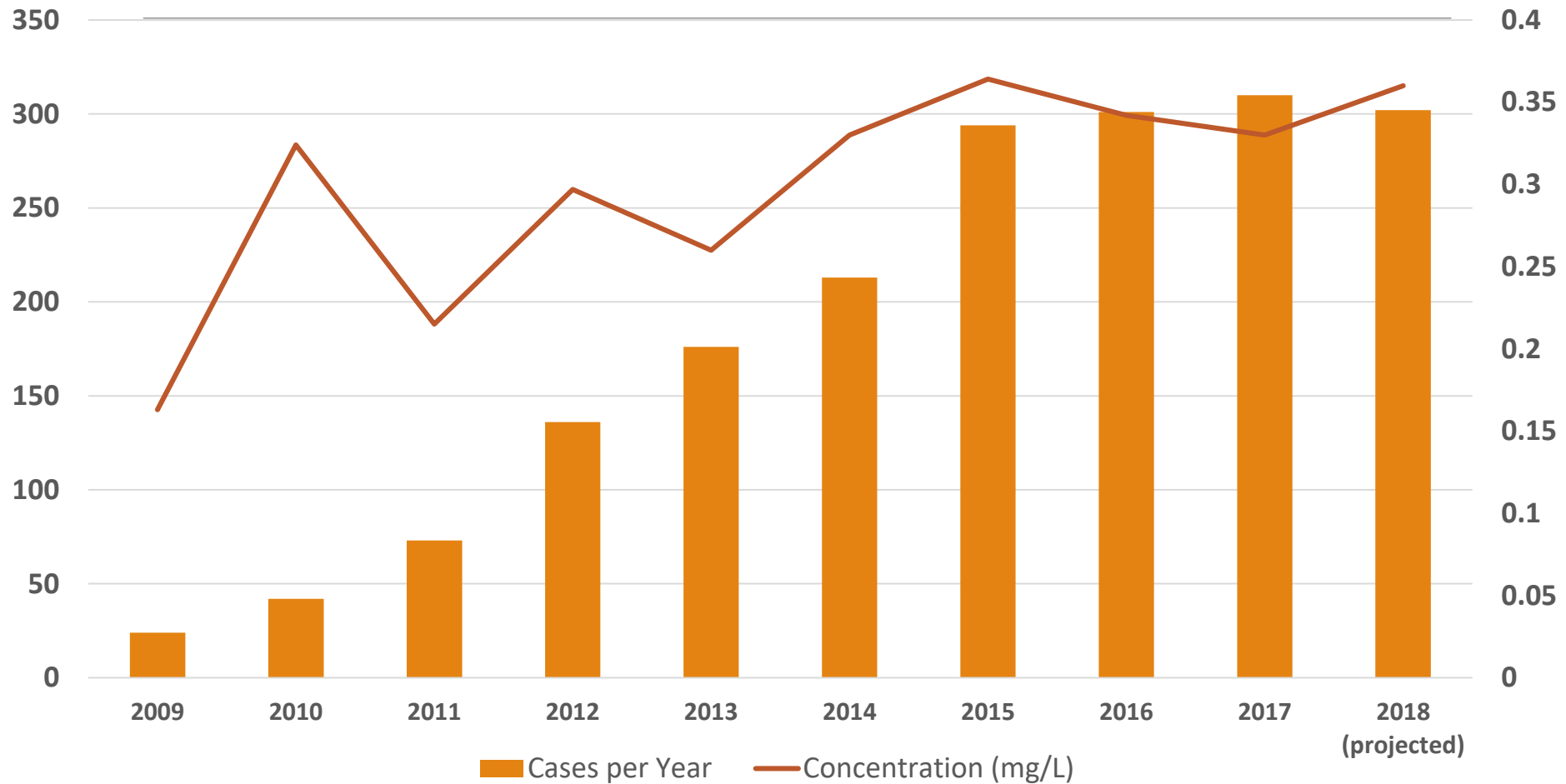


Breakdown of Ethanol Confirmed/ Drugs Confirmed



Methamphetamine - DUI's

Methamphetamine



THC - DUI's

2017: 284 cases and mean concentration at 7.8

2018 (projected): 412 and mean concentration at 8.6

1-2.9 ng/mL: 30%

3-4.9 ng/mL: 14%

5-9.9 ng/mL: 27%

10-19 ng/mL: 21%

>20 ng/mL: 8%

Novel Drugs

- 1-1 Difluoroethane
 - An inhalant, primarily found as an aerosol propellant (Dust-Off)
 - 2016, there were 11 DUI cases
 - 2017, there were 20 DUI cases
 - 2018, projected 12 DUI cases
- Designer benzodiazepine's
 - Not approved for use in the United States
 - Can cause euphoria, sedation, depression, and slurred speech
 - 2016, there were 2 DUI cases
 - 2017, there were 7 DUI cases
 - 2018, projected 4 DUI cases

Contact Information

slarson@mt.gov

406-329-1179