

December 1, 2021



Center for Substance Abuse Research

## Oregon Health and Science University (OHSU)

### Drug Test Results from the Hospital's Electronic Health Records, January 2011-June 2021

OHSU located in Portland, Oregon submitted drug test results for 2,159 specimens tested by the hospital laboratory for the period of January 1, 2011 through June 30, 2021 that met the study eligibility criteria. De-identified data were obtained for patients 18 years or older presenting to the emergency department with a complaint of "overdose" and/or any ICD 10-CM T36-T50 initial encounter diagnosis code of overdose with accidental (unintentional), intentional self-harm, or undetermined intent that had a drug urinalysis conducted with valid drug test results available.

#### *Highlights from Table 1 and Figures 1, 2, and 3*

- Amphetamines (48%) remained close to their 11-year high in April-June 2021, and were 3 times their level in 2011 (Table 1).
- Benzodiazepines (16%) and oxycodone (7%) were close to their 11-year lows (Table 1).
- Amphetamines, benzodiazepines, marijuana, and opiates remained the most prevalent drugs detected in April-June 2021. Benzodiazepines are much less prevalent now than in 2011 while amphetamines are rising (Figure 1).
- Barbiturates, cocaine, methadone, and oxycodone were all detected in under 10% of specimens in April-June 2021 (Figure 2).
- Amphetamines are near the top of their 11-year range, while benzodiazepines and oxycodone are near the bottom (Figure 3).

#### *Figures 4, 5, and 6 analyze combined data from January 2011-June 2021*

- Patients positive for oxycodone, barbiturates, and/or methadone were oldest. Patients positive for stimulant drugs including cocaine and amphetamines, as well as marijuana, were youngest (Figure 4).
- Patients positive for methadone had the highest mean total number of drugs positive (2.95). Patients positive for marijuana had the lowest mean total number of drugs positive (2.19, Figure 5).
- 30% or more of specimens positive for opiates also contained benzodiazepines, marijuana, amphetamines, and/or oxycodone. 27% or more of specimens positive for marijuana also contained benzodiazepines, opiates, and/or amphetamines (Figure 6).

The Emergency Department Drug Surveillance (EDDS) project is funded by the Executive Office of the President, Office of National Drug Control Policy (ONDCP), Cooperative Agreement #G2099ONDCP09A awarded to Center for Substance Abuse Research (CESAR) at University of Maryland, College Park. The information and opinions expressed herein are the views of the authors and do not necessarily represent the views of ONDCP or any other agency of the Federal Government. For additional data: <https://cesar.umd.edu/landing/EDDS>.

**Table 1: Drugs Detected in Specimens from Oregon Health & Science University (OHSU) Emergency Department (ED) Drug Overdose Patients, By Quarter**

(N=2,159 specimens collected from January 2011 through June 2021)

Quarter (N of specimens tested)	Marijuana <sup>a</sup> %	Benzodiazepines <sup>a</sup> %	Opiates %	Amphetamines %	Oxycodone %	Methadone <sup>a</sup> %	Cocaine %	Barbiturates %
January-March 2011 (49)	27	47	31	16	16	10	6	0
April-June 2011 (51)	29	49	28	14	18	6	10	2
July-September 2011 (69)	20	(n=68) 54	35	7 L	19	(n=68) 9	7	6
October-December 2011 (53)	30	59 H	28	23	13	11	6	0
January-March 2012 (47)	28	49	21	13	19	13	4	4
April-June 2012 (61)	25	36	33	20	12	7	8	0
July-September 2012 (55)	29	29	24	16	33	9	9	2
October-December 2012 (56)	30	18	20	20	38 H	5	7	2
January-March 2013 (60)	25	28	38	13	18	5	7	8
April-June 2013 (57)	16	19	23	26	12	4	9	0
July-September 2013 (63)	27	35	40	25	10	11	8	0
October-December 2013 (43)	16 L	23	26	23	14	9	5	0
January-March 2014 (58)	26	22	35	24	7	5	3	2
April-June 2014 (53)	19	30	34	17	15	13	4	4
July-September 2014 (74)	30	31	30	22	14	10	11	1
October-December 2014 (61)	28	16	21	15	7	3	3	2
January-March 2015 (61)	25	26	31	23	12	7	7	0
April-June 2015 (58)	35	33	35	33	17	7	7	2
July-September 2015 (46)	26	26	46 H	33	22	4	7	2
October-December 2015 (48)	33	15	33	27	8	8	15	0
January-March 2016 (32)	28	13 L	13	9	16	3	0 L	0
April-June 2016 (43)	28	35	33	35	7	7	2	2
July-September 2016 (51)	28	28	26	24	12	2	4	0
October-December 2016 (42)	36	29	24	17	12	5	7	2
January-March 2017 (60)	38	32	25	27	7	5	7	3
April-June 2017 (52)	33	27	33	33	10	4	8	8 H
July-September 2017 (67)	30	21	30	30	18	10	3	2
October-December 2017 (46)	46 H	17	28	28	20	2	7	0
January-March 2018 (61)	44	21	18	23	3 L	3	3	0
April-June 2018 (62)	31	24	19	24	7	13	5	0

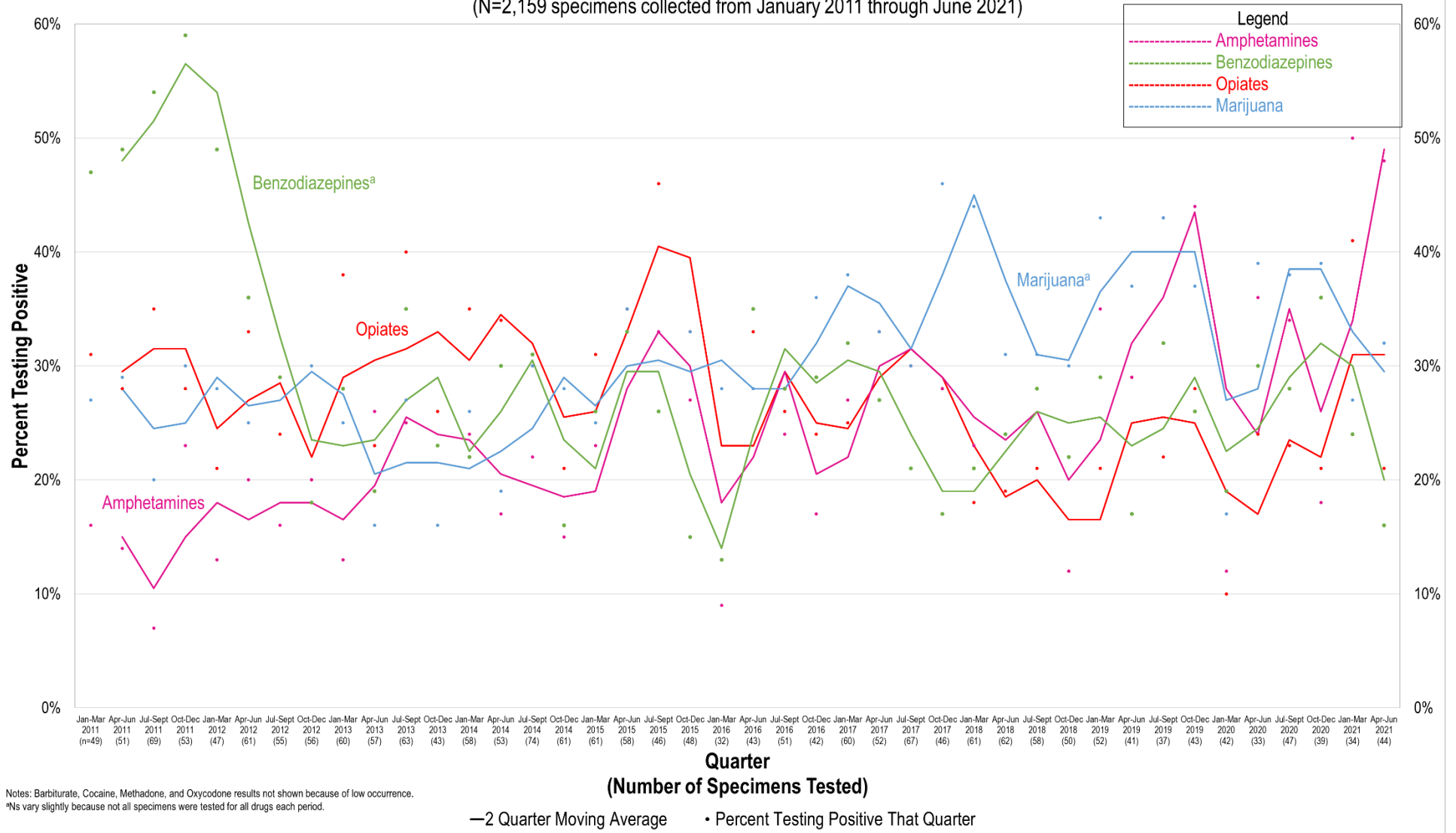
July-September 2018 (58)	31	28	21	28	9	14	2	0
October-December 2018 (50)	30	22	12	12	10	4	8	2
January-March 2019 (52)	(n=51) 43	29	21	35	10	4	6	0
April-June 2019 (41)	37	17	29	29	10	0	15 H	2
July-September 2019 (37)	43	32	22	43	11	14 H	8	0
October-December 2019 (43)	37	26	28	44	9	2	7	0
January-March 2020 (42)	17	19	10 L	12	10	0 L	5	0
April-June 2020 (33)	39	30	24	36	12	9	3	0
July-September 2020 (47)	38	28	23	34	23	9	2	0 L
October-December 2020 (39)	39	36	21	18	15	5	10	3
January-March 2021 (34)	27	24	41	50 H	12	6	3	3
April-June 2021 (44)	32	16	21	48	7	5	5	5
<b>Quarter (N of specimens tested)</b>	<b>Marijuana<sup>a</sup> %</b>	<b>Benzodiazepines<sup>a</sup> %</b>	<b>Opiates %</b>	<b>Amphetamines %</b>	<b>Oxycodone %</b>	<b>Methadone<sup>a</sup> %</b>	<b>Cocaine %</b>	<b>Barbiturates %</b>

Notes: H: Highest %. L: Lowest %. If there are multiple highs or lows, the most recent quarter is selected as the high/low.

<sup>a</sup>Ns vary slightly because not all specimens were tested for all drugs each period.

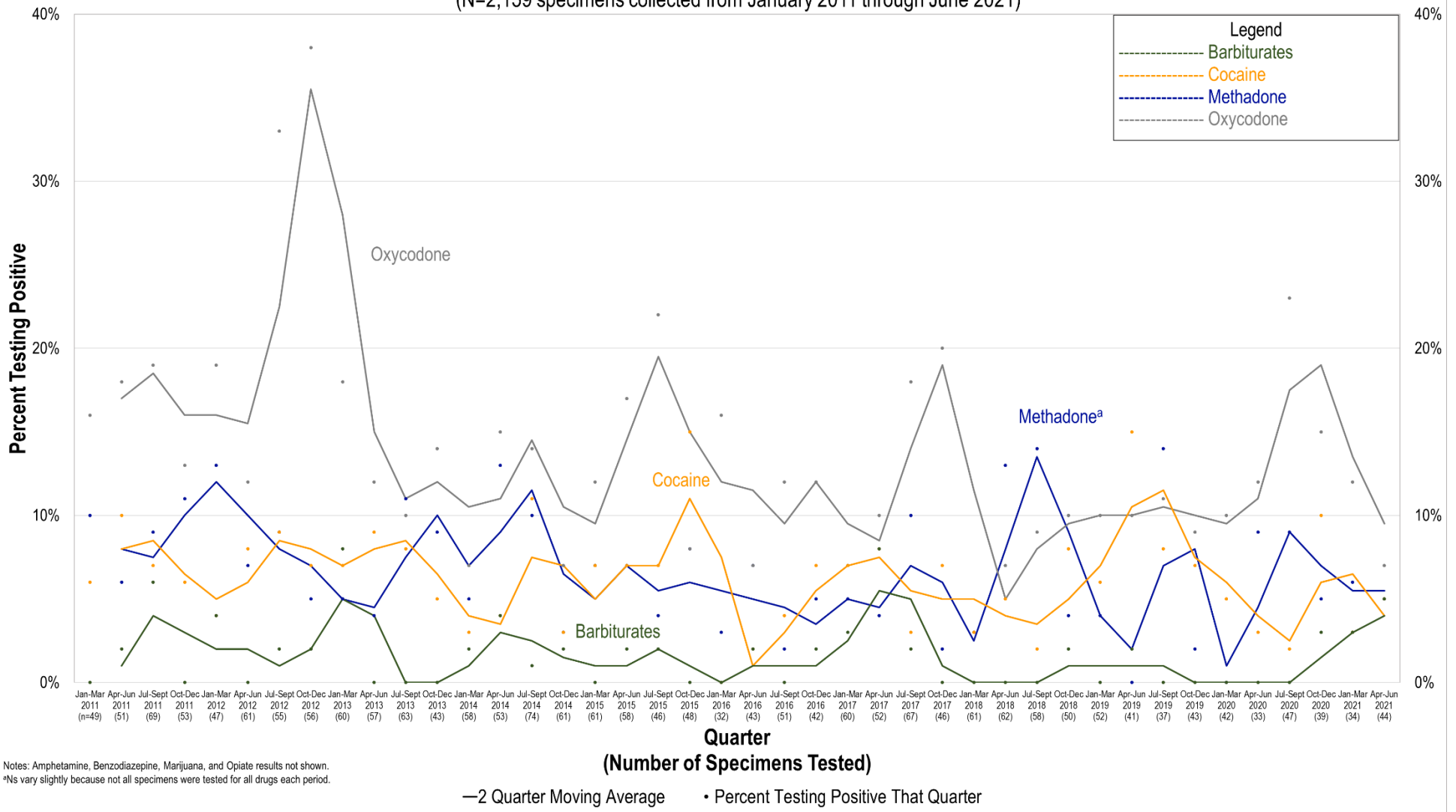
**Amphetamines (48%) remained close to their 11-year high in April-June 2021, and were 3 times their level in 2011. Benzodiazepines (16%) and oxycodone (7%) were close to their 11-year lows.**

**Figure 1: Most Prevalent Drugs Detected in Specimens from Oregon Health & Science University (OHSU) Emergency Department (ED) Drug Overdose Patients, By Quarter**  
(N=2,159 specimens collected from January 2011 through June 2021)



**Amphetamines, benzodiazepines, marijuana, and opiates remained the most prevalent drugs detected in April-June 2021. Benzodiazepines are much less prevalent now than in 2011 while amphetamines are rising.**

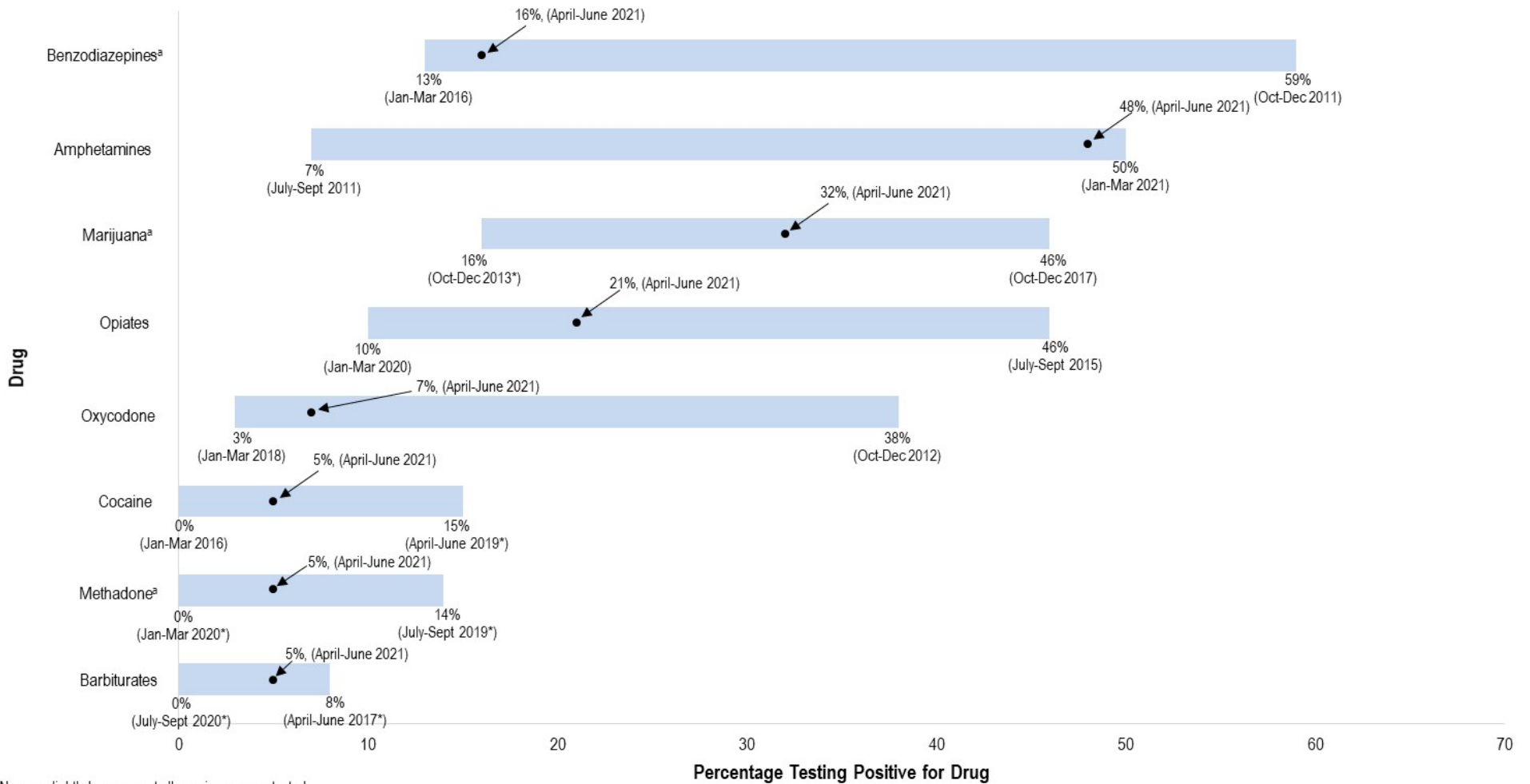
**Figure 2: Least Prevalent Drugs Detected in Specimens from Oregon Health & Science University (OHSU) Emergency Department (ED) Drug Overdose Patients, By Quarter**  
 (N=2,159 specimens collected from January 2011 through June 2021)



**Barbiturates, cocaine, methadone, and oxycodone were all detected in under 10% of specimens in April-June 2021.**

**Figure 3: Range of the High and Low of Quarterly Percentages Testing Positive for Each Drug at the Oregon Health & Science University (OHSU) Emergency Department (ED), January 2011-June 2021**

(N=2,159 specimens collected from drug overdose patients)



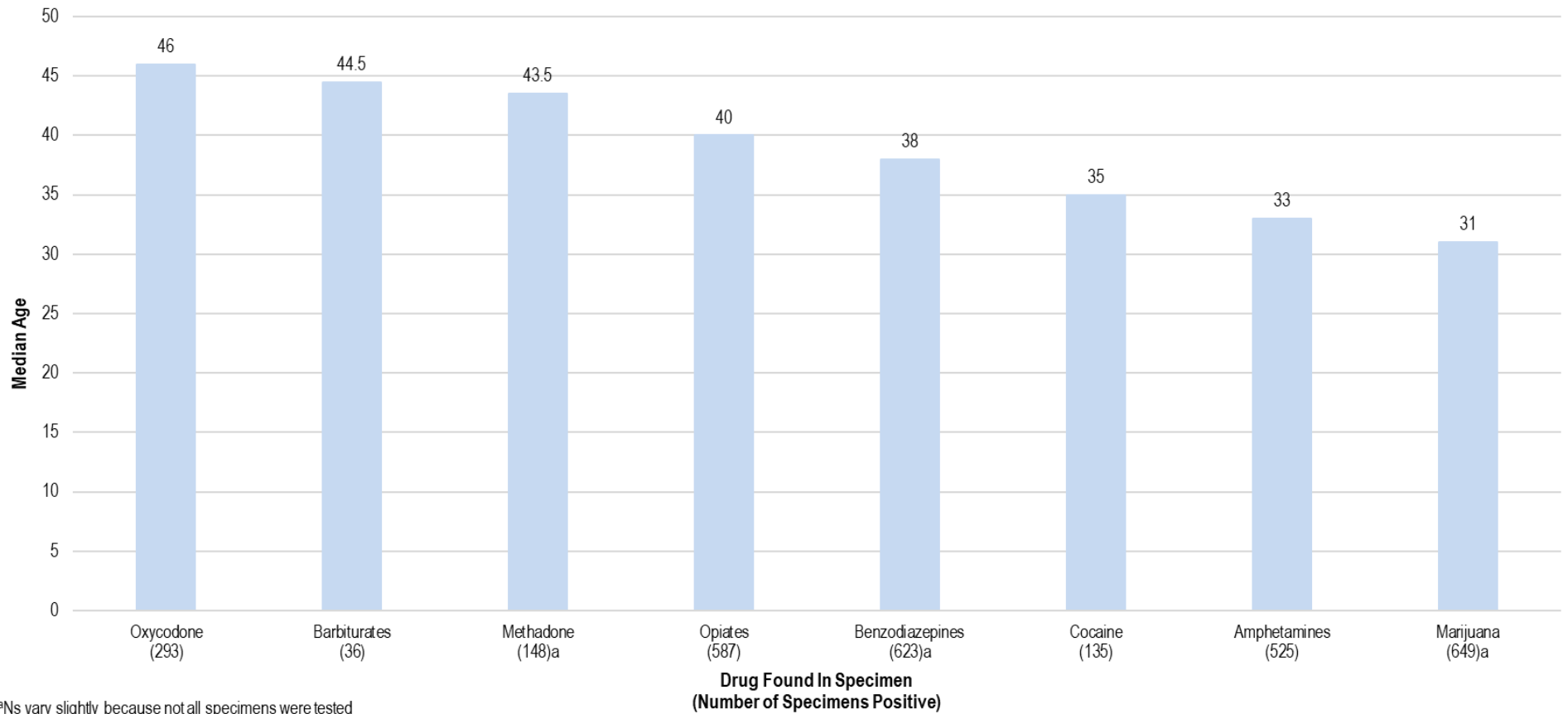
<sup>a</sup>Ns vary slightly because not all specimens were tested for all drugs each period.

● Percentage Testing Positive in April-June 2021

\*Percentage occurred in multiple quarters; most recent quarter indicated

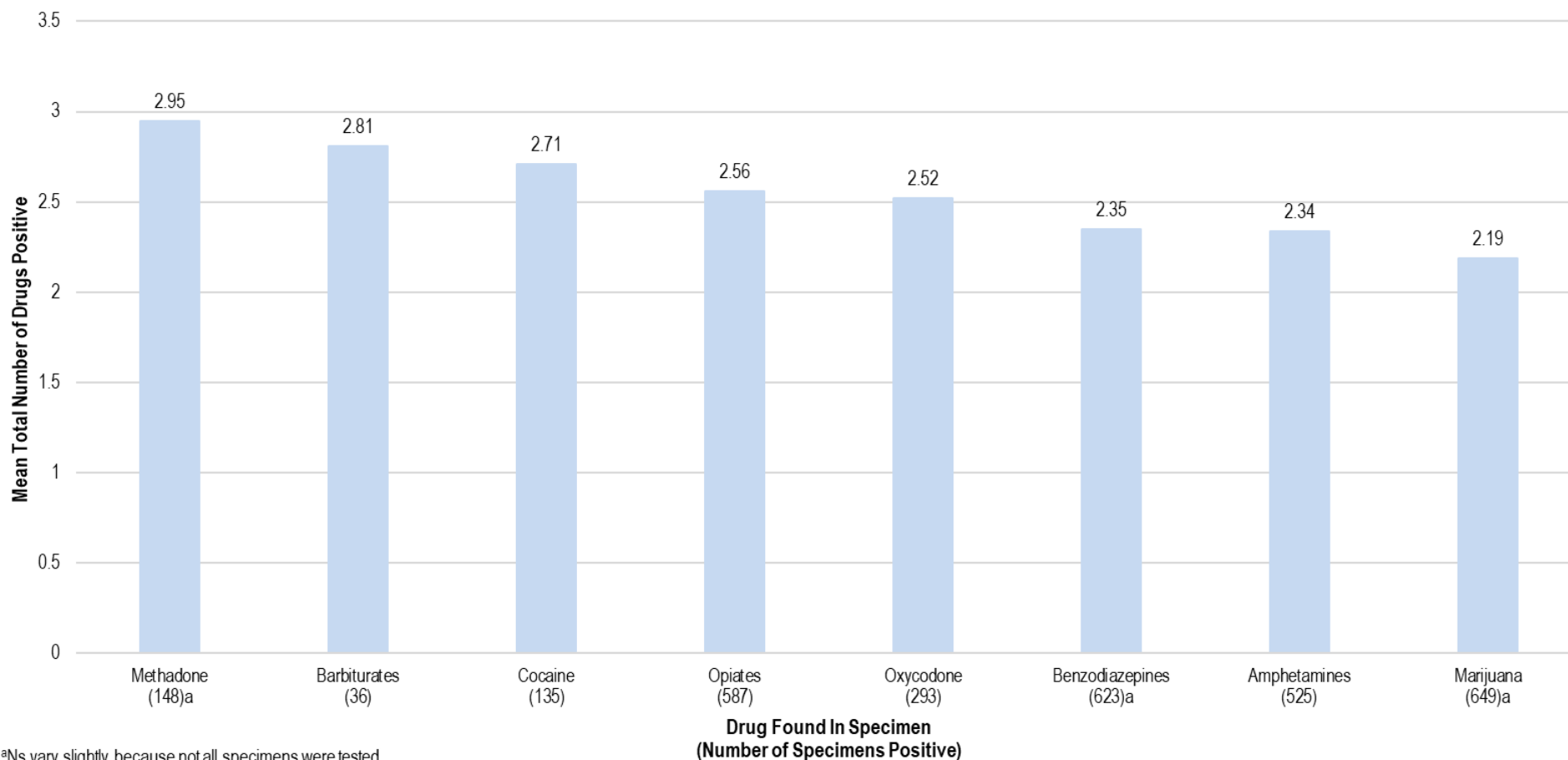
**Amphetamines are near the top of their 11-year range, while benzodiazepines and oxycodone are near the bottom.**

**Figure 4: Median Patient Age, By Drug Positive in Specimens from Oregon Health & Science University (OHSU) Emergency Department (ED) Drug Overdose Patients**  
 (N=2,159 specimens from January 2011 through June 2021 combined)



**Patients positive for oxycodone, barbiturates, and/or methadone were oldest. Patients positive for stimulant drugs including cocaine and amphetamines, as well as marijuana, were youngest.**

**Figure 5: Mean Total Number of Drugs Positive, By Drug Positive in Specimens from Oregon Health & Science University (OHSU) Emergency Department (ED) Drug Overdose Patients**  
 (N=2,159 specimens from January 2011 through June 2021 combined)

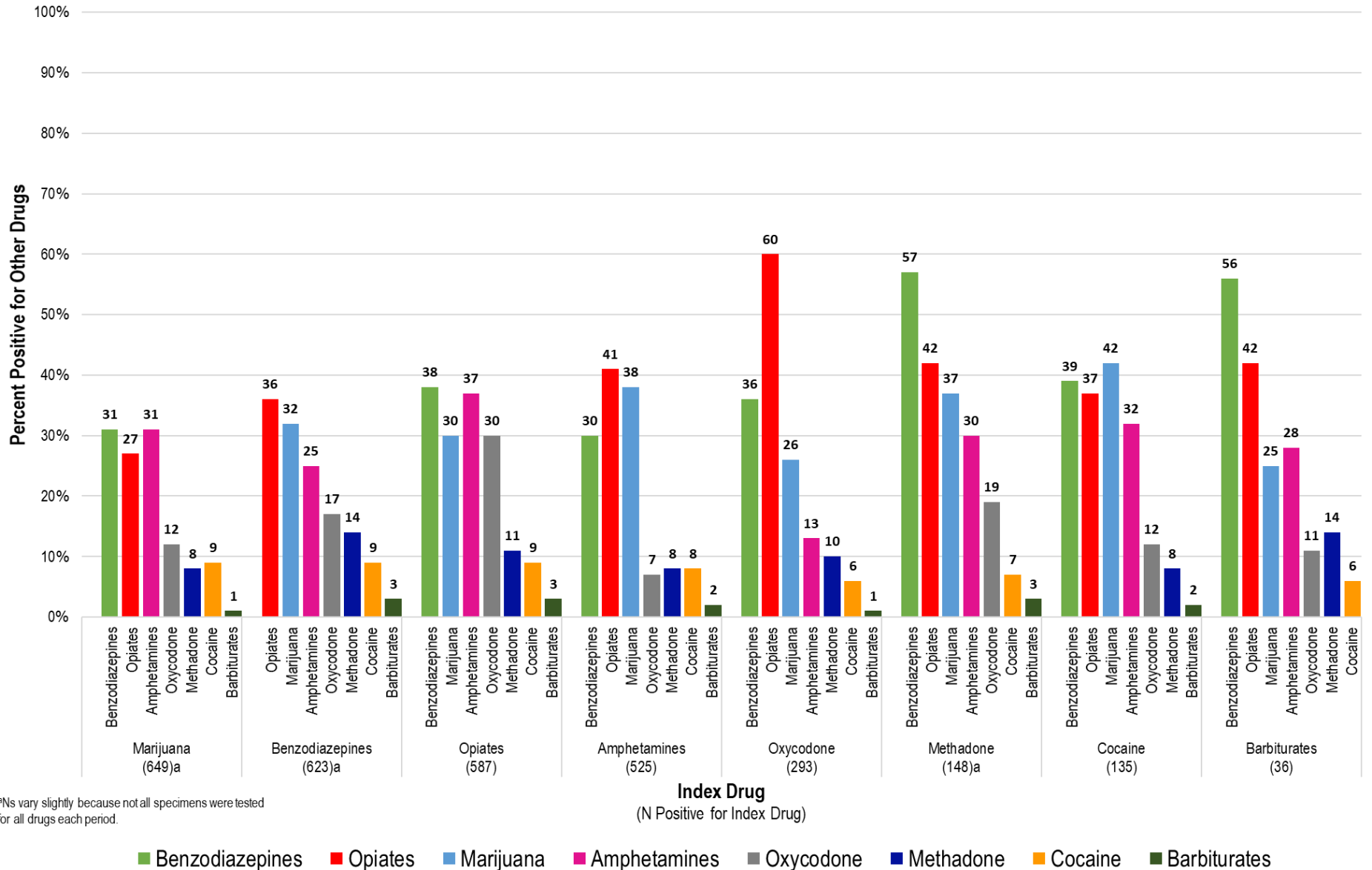


<sup>a</sup>Ns vary slightly because not all specimens were tested for all drugs each period.

**Patients positive for methadone had the highest mean total number of drugs positive (2.95). Patients positive for marijuana had the lowest mean total number of drugs positive (2.19).**

**Figure 6: Other Drugs Found in Specimens Positive for an Index Drug**

(N=2,159 specimens from OHSU from January 2011 through June 2021 combined)



**30% or more of specimens positive for opiates also contained benzodiazepines, marijuana, amphetamines, and/or oxycodone. 27% or more of specimens positive for marijuana also contained benzodiazepines, opiates, and/or amphetamines.**