

Urine Drug Tests for Methamphetamine Show Increasing Use

Sarah Smiley¹, Joyce Nickley¹, Kevin Krock¹, Richard Thomas¹ and Amadeo Pesce^{2*}

¹Precision Diagnostics LLC 4215, Sorrento Valley Blvd, San Diego, CA, 92121, USA

²School of Medicine, University of California, San Diego, CA, USA

*Corresponding author: Amadeo Pesce, School of Medicine, University of California, San Diego, CA, USA, E-mail: amadeo.pesce@precisiondxlab.com

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Letter to the Editor

We performed 807,535 comprehensive urine drug tests on urine specimens submitted by pain, rehabilitation, internal medicine, and behavioral clinics. The data for positive urine methamphetamine results was extracted. The percentage of methamphetamine per total specimen volume per month was obtained. From April 1, 2016 to October 2016 this value was a little less than 4%, and increased to nearly 6% by April 2018. Methamphetamine is a rarely prescribed drug; thus, these results predominantly indicate illicit drug use. The increase in the percent of specimens with methamphetamine corresponds with the increase in hospitalizations in the time frame set out by Winkelman et al. Our data shows a continued increase up to August 2018 which agrees with the recent release of Overdose Death Rates from the National Institute on Drug Abuse (NIDA)

A recent report noted that there was an increase in hospitalizations due to amphetamine use. [1] Besides prescription amphetamine such as Adderall or Vyvanse, the most common drug yielding positive amphetamine drug tests is methamphetamine. Illicit methamphetamine is a powerful and addictive CNS stimulant used largely as a drug of abuse. Methamphetamine may also be present in drugs used for the treatment of obesity, hyperactivity disorders, Parkinson's disease, and nasal congestion [2-4]. We performed drug testing on urine specimens from two patient populations known to have substance abuse disorder, -pain patients and those in rehabilitation clinics. We considered the possibility that this increase in methamphetamine use would be evident in our test population.

According to the National Center for National Vital Statistics Reports, Vol. 65, No. 10, December 2016, methamphetamine was listed as one of the top 10 drugs involved in drug overdose deaths: United States, 2010–2014; [5]. The number of deaths attributed to methamphetamine more than doubled from 3.6 percent in 2010 to 7.9 percent in 2014 [6].

From April 1, 2016 to August 31, 2018 we performed 807,535 comprehensive urine drug tests on urine specimens submitted by pain, rehabilitation, internal medicine, and behavioral clinics. The study was approved by ASPIRE IRB Santee, California. The method of analysis has been described by Krock et al. [7]. We only list pain and rehab in the intro paragraph?

The data for positive urine methamphetamine results was extracted. The percentage of methamphetamine per total specimen volume per month was obtained as shown in Figure 1.

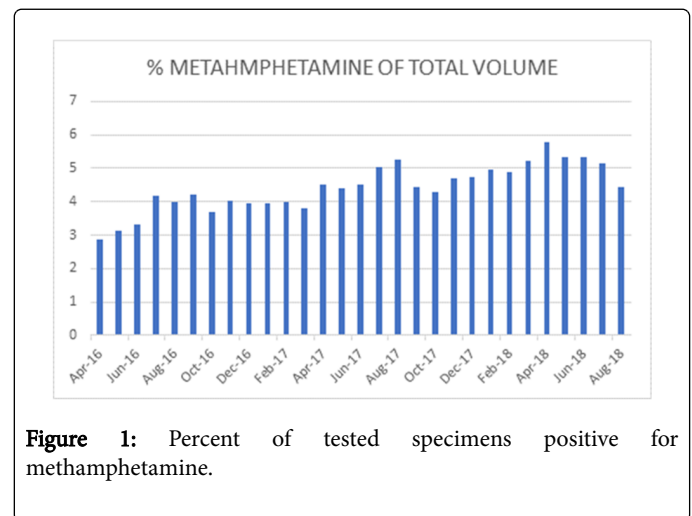


Figure 1: Percent of tested specimens positive for methamphetamine.

The presence of methamphetamine as a percent of specimens is expressed in Figure 1. From April 2016 to October 2016 this value was a little less than 4%, and increased to nearly 6% by April 2018.

Methamphetamine is a rarely prescribed drug; thus, these results predominantly indicate illicit drug use. The increase in the percent of specimens with methamphetamine corresponds with the increase in hospitalizations in the time frame set out by Winkelman et al. [1]. Our data shows a continued increase up to August 2018 which agrees with the recent release of Overdose Death Rates from the National Institute on Drug Abuse (NIDA) [7]. In a previous study of pain patients, we reported a positivity rate of 1% within a large pain population [4]. We argue that urine drug screens in this vulnerable population can be used to predict harm to this population as it relates to methamphetamine [8,9].

References

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