

Potential Drugs of Abuse

Findings that were presented at the American Academy of Addiction Psychiatry (AAAP) 24th Annual Meeting & Symposium reported illegal or "nonmedical" use of prescribed atypical antipsychotics in combination with alcohol, opioids, cocaine/crack, methamphetamine, and/or cannabis. The most common reasons reported for taking atypical antipsychotics were to recover from the side effects associated with using drugs and alcohol, followed by the desire to enhance the effects of other substances and experimentation with recreational drugs.

Quetiapine is the most abused atypical antipsychotics. Street names for quetiapine include "quell," "Susie-Q," and "baby heroin," and "Q-ball" refers to a combination of cocaine and quetiapine. The neuropharmacological reasons for antipsychotics' abuse potential are difficult to quantify. Quetiapine and olanzapine have been used to treat cocaine and alcohol abuse, and work perhaps by decreasing the dopamine reward system response to substance use. Quetiapine's rapid dissociation from the dopamine receptor has been theorized to contribute to the drug's abuse potential. Another point to consider is that quetiapine may cause impairment but may not produce a positive result in a drug screen.

Patients addicted to opioids sometimes use inexpensive and available substitutes like Imodium (loperamide). Imodium works by acting on the opioid receptor in the large intestine. The use of this drug in high doses may result in opioid intoxication. However, at large doses required to "get high" puts patients at risk for QT prolongation, QRS widening, ventricular arrhythmias and torsade de pointes, due to loperamide's physiologic activity. These cardiac effects may result in syncope and death.

Xylazine is a tranquilizer not approved for use in humans, it is a non-opiate sedative, analgesic, and muscle relaxant only authorized in the United States for veterinary use according to the U.S. Food and Drug Administration. It is not currently a controlled substance under the U.S. Controlled Substances Act. It can be life threatening and especially dangerous when it is combined with opioids like fentanyl. Xylazine is being found in the US illicit drug supply and has been linked to overdose deaths. The presence of xylazine in drugs tested in labs increased in every region of the United States from 2020-2021, with the largest increase in the South.

Medications That May Cause False-Positive Results on Drug Tests

Testing for amphetamines and common medications that can cause false positives for amphetamine in a urine drug test screening, include phentermine, bupropion, chlorpromazine, and promethazine. In addition, some over the counter products such as pseudoephedrine, ephedrine, phenylephrine, and decongestants common in over-the-counter cold medicines are known to cross-react with the amphetamine assay.

It is important to know which drugs can cause false-positive fentanyl results when reviewing urine drug screens. Some include risperidone, trazodone, and even labetalol. It has been established that risperidone may cause false positive fentanyl results on urine drug screens (UDS). Due to structural

similarities, ziprasidone may also cause this same result. If a positive screening immunoassay is observed, it may make sense to order a confirmatory test to determine which substances are involved.

Opiates and opioids are different from one another. Opiates are substances derived from an opium plant (such as codeine or morphine). Opioids are synthetic or semi-synthetic (such as oxycodone, fentanyl, or hydromorphone). False positives are common on these immunoassays. False-positive results for opiates can occur with opioids such as hydromorphone. Naloxone and naltrexone can cause false-positive results for oxycodone. Rifampin and rifampicin, which treats tuberculosis, have also been known to interfere in rapid urine opiate immunoassays. Quinolones have also been known to cause false-positive results on urine screens for opiates.

Medications that can cause positive phencyclidine (PCP) results include dextromethorphan, carbamazepine, tricyclic antidepressants, and venlafaxine. Benadryl and Advil PM contain the ingredient diphenhydramine. Diphenhydramine can relieve coughs and runny noses. But on drug screens, it can show up as methadone. Diphenhydramine also may show up as PCP, an illegal hallucinogenic that is one of five types of drugs that applicants for all federal and many private-sector jobs are screened for.

Common medication that can cause a false positive for benzodiazepine are sertraline mainly used to treat depression, ibuprofen and oxaprozin, nonsteroidal anti-inflammatory drug (NSAID).

A detailed medication history, including prescription, nonprescription, and herbal medications, and proper knowledge of medications that cross-react with urine drug screens are essential. Immunoassay-type urine drug screens offer clinicians rapid drug screen results, are easy to use and are inexpensive. Unfortunately, these screens are not without limitations. In situations where it would impact a person's life to have a false positive, consider doing confirmatory testing.

References:

1. <https://www.medscape.com/viewarticle/817961>
2. Katselou M, Papoutsis I, Nikolaou P, et al. "Poor man's methadone" can kill the poor man. Extra-medical uses of loperamide: a review. *Forensic Toxicol.* 2017 July;35(2):217-31
3. <https://www.dea.gov/sites/default/files/2022-12/The%20Growing%20Threat%20of%20Xylazine%20and%20its%20Mixture%20with%20Illicit%20Drugs.pdf>
4. https://cdn.mdedge.com/files/s3fs-public/Document/September-2017/1005CP_SavvyPsych.pdf
5. <https://pubmed.ncbi.nlm.nih.gov/18359967/>
6. [https://www.mayoclinicproceedings.org/article/S0025-6196\(11\)61120-8/fulltext](https://www.mayoclinicproceedings.org/article/S0025-6196(11)61120-8/fulltext)

PREFERRED DRUG LIST UPDATES CAN BE FOUND HERE:

Integrated (Title 19/21 SMI), ACC, DD, ALTCS and DCS CHP

<https://www.mercycareaz.org/providers/pharmacy.html>

Behavioral Health (Non-Title 19/21)

<https://www.mercycareaz.org/providers/pharmacy.html>

**** Drugs that are not on the formulary will require a PA (prior authorization) request to be submitted****

Reminder for quicker determinations of a Prior Authorization use the ePA link for Our Providers: Please click [here to initiate an electronic prior authorization \(ePA\)](#) request

This newsletter is brought to you by the Mercy Care Pharmacy Team. For questions, please email Fanny A Musto (MustoF@mercycares.org), Denise Volkov (VolkovD@mercycares.org) or Trennette Gilbert (gilbert@mercycares.org)