

# How the Small Volume Blood Process Can Help Clinics With Addiction Patients

## The Small Volume Blood Process

Blood is the most accurate and reliable matrix for toxicology testing, but in the past it has been too invasive and inconvenient, requiring a phlebotomist and blood draw. Fortunately, Physicians Toxicology developed a less invasive, fast, and convenient way to make blood testing simple and reliable with our **Small Volume Blood Toxicology Tests**.

Our small volume blood toxicology tests cover a comprehensive test menu, so we can quickly detect many drugs, including xylazine. Physicians Toxicology's lab was one of the first to test for xylazine, and our test can detect levels of it as low as 2 ng/mL in the blood.

With our client-focused, innovative approach to testing, we're quick to respond and able to bring on additional drug tests at an accelerated rate.

### How Does It Work?

We use volumetric absorptive microsampling to collect 20 uL of blood for testing with a simple finger prick. Our scientists extract the blood from the finger using a double extraction technique, then analyze it using highly sensitive LCMS/MS technology.

## Dangers of Recreational Xylazine Use

Xylazine, also known by its street names Tranq, Tranq Dope, and Zombie Drug, is a deadly drug that is rapidly spreading through the illicit drug supply. It's often mixed with other drugs, particularly heroin and fentanyl, which creates unpredictable and dangerous drug combinations that can harm users.

Since it is an animal sedative, it is not safe for human use in any amount, and it does not respond to naloxone. Quick detection is essential for positive patient outcomes.

Symptoms of xylazine include:

- Sedation
- Severe skin rot

- Slow respiratory rate
- Slow Heart rate
- Muscle relaxation

Withdrawal symptoms look like:

- Migraines
- Double vision
- Numbness in fingers and toes
- Sweats
- Double vision
- Severe anxiety

## Quickness and Stability of the Blood

Drugs are detectable in blood within minutes to hours, whereas in urine, they must be metabolized before they are detectable by a drug test. Plus, most drugs are stable in small volume blood specimens for at least 10 days at room temperature and 30 days when refrigerated or frozen.

## Maintaining the Sample's Chain of Custody

Each collection kit includes a clamshell with two VAMS tips. The clamshells and tips are individually labeled with a unique identifier. Additionally, a requisition number is attached to the clamshell at the time of collection.

Once the sample arrives at the lab, it is assigned a specimen number. The sample can be easily traced by these identifiers throughout each process to ensure the chain of custody of the sample is maintained.

## Why Small Volume Blood Testing is a Perfect Fit for Addiction Medicine

Urine testing has been the gold standard in toxicology, however, urine is easy to adulterate. There is a risk of spiking a sample or a patient using a fake urine sample, and patients can use the shy bladder excuse.

Blood has always been the most reliable and accurate matrix for testing drugs, but in the past, it has been inconvenient and invasive. Our small volume blood testing is fast, detecting the

presence of drugs within minutes of use, and it's easy with a simple finger prick. The results provide the accuracy and reliability you need in addiction medicine to treat patients.

Physician Toxicology's small volume blood testing is the future of toxicology.

## Physicians Toxicology's Mission Statement

At Physicians Toxicology, we are committed to fostering an inclusive, supportive environment where each member of our team feels valued, empowered, and inspired to excel. We firmly believe in the power of collaboration, encouraging teamwork that unites diverse perspectives, and expertise to drive innovative solutions.

Our purpose extends beyond our labs - it's in the rigorous accuracy of each test we conduct, the insightful data we provide, and the unwavering service we deliver. We are dedicated to upholding the highest standards of scientific integrity and precision in all we do, ensuring that the results we produce are not just accurate but unequivocally trusted.

In our pursuit of excellence, we place paramount importance on our interactions with clients. We strive to create and maintain robust, respectful relationships, grounded in open communication and understanding. Our clients' needs and aspirations guide our work, and their satisfaction is our highest measure of success.

In all these, we aim to uphold a positive, engaging work environment that promotes high morale, cultivates professional growth, and champions the well-being of every employee. We believe that when we care for our team, they can better care for our clients and the world we serve.

We are Physicians Toxicology, where accuracy meets humanity, and science serves the greater good.