



## Mountainside Harm Reduction Society

Please read the following information.

1. We are not responsible for any harms or problems you may experience as a result of ingesting any substances.
2. All drug testing results are offered in good faith, with no guarantees as to the accuracy of test results.
3. As a condition of receiving drug testing services, you agree not to sue anyone involved in the Check It service for any reason related to the testing of substances, including but not limited to any advice, information or test results given to you, or any harms from consumption of any drugs or substances tested for you.

### **OUR DRUG CHECKING SERVICE HAS SOME LIMITATIONS THAT YOU NEED TO KNOW ABOUT**

Please be aware that FTIR spectroscopy has some limitations. This form of technology is ideal for high traffic drug checking. It has **limited ability to test some samples** as illustrated below and only provides an **estimate of the amount of each substance present (quantification)**. If you are interested in the different drug checking technologies out there, please consult the BCCSU's [drug checking evidence report](#). Immunoassay test strips also have some limitations. They **do not indicate what analogue is present**, the test strips **do not tell you the amount of the substance being detected** and there is a chance for **false or invalid results**.



## **FTIR LIMITATIONS**

### **Limited ability to test some samples.**

Our technicians can only identify substances present in our reference libraries of 15000+ substances. If a sample has no possible matches, we list it as **no library match**. The FTIR has an estimated detection limit of 5%. This is only an estimate, and the limit of detection could vary slightly per sample and per technician. Any substance present at concentrations below this detection limit may not be detected. These could be toxic; they could change the potency of your drugs and cause unexpected effects. This effects our ability to test potent samples with low doses, like pills or drugs on blotters. These samples usually have active ingredients below our detection limit. It also limits our ability to test liquid samples. Often, the liquid the sample is dissolved in is at a much higher amount than the active ingredient. This means we may not be able to test most liquid samples or accurately identify their contents. It means we do not attempt to test complex mixtures like organic material or drugs in food. Organic matter like cannabis and salvia are mixtures of hundreds of compounds and they only appear as uncertain carbohydrates and oils on the machine. If we detect a substance at levels close to our detection limit, we may not be able to identify it, we will list these as **uncertain match**. In cases where we cannot match substances, we will use our experience to try and provide as much information as possible on what it may be but cannot guarantee it's validity.

### **Estimate the amount of each substance present (quantification)**

FTIR does not separate and measure each individual substance. Therefore, percentages provided are estimates. The technician uses the software and their own experience to estimate the amount of each substance present and provide it, so you have the most information about your sample. As such, these percentages may not be accurate, they may vary between technicians, and they may vary between samples. These percentages may not indicate how potent your substance is. Potency will vary between individuals and may vary between similar testing samples. Things like



unequally mixed samples may also affect the results of samples from the same batch. We do not include percentages if only one substance is detected. Values listed as N/A are substances we were unable to assign a percentage to.

## Other considerations

Your experience with a drug has many influencing factors. Therefore, if your results do not align with what you experienced, this could be due to something else. We often refer to the 3S's in harm reduction!

**Setting:** with friends? alone? are you comfortable? are you stressed? are you upset? - **All of these can cause different experiences when taking the same substance again at the same dosage.**

**Substance:** Dosage? You've used multiple times this week? Are you consuming multiple substances? Is the substance cut with anything? Different route of consumption? - **Differences in your substances, how much you take, how you take it and how often you've been taking a substance can cause different experiences, even when in the same setting.**

**Set:** Experience with a drug? Age? Sex? Weight? Last meal? Hydration? Alertness? Current mental and physical health? - **This will always change and depending on where your body is at, your drugs could create a different experience despite the same setting and the exact same substance.**

## IMMUNOASSAY TEST STRIP LIMITATIONS

### Do not indicate what analogue is present

We rely on test strip results to confirm potent substances are present below our 5% detection limit. The test strips are specific for certain substances and ones that share similar structures (analogues). We cannot confirm what substance was detected, only if it is present or not. These structurally similar analogues could be less potent or even stronger than what the test strip is meant to detect, example: the fentanyl test strips can detect both fentanyl or Carfentanil (100 to 200 times stronger than fentanyl).



## **Do not tell you the amount of the substance being detected**

When there is a positive result, it means that specific substance or its analogue is present below our 5% detection limit. Any substance above this threshold will either be identified or listed as an uncertain match. The amount of this substance is unknown, example: fentanyl test strips can theoretically detect fentanyl down about 0.001%. Therefore, due to this broad detection range, positive test strip results do not indicate the amount of the substance being detected.

## **False or invalid results**

Since these test strips are designed to detect substances and their metabolites in urine, they aren't specifically designed for drug checking. Our technicians are trained to be aware of this, however, the strips may malfunction and provide **false positives** (positive results when the drug being detected is not actually present). A test strip can appear positive when a substance that has a similar structure to the drug that is being detected is present. This is called **cross reactivity**. We use our experience, repeat tests and use our knowledge of cross-reactive compounds to perform these tests as accurately as possible. There is also the possibility of **false negatives** (negative results when the drug being detected is present). These can happen when the drug is present at trace quantities in the sample or when dealing with analogues that the test strip is less sensitive for and does not detect as easily, example: the test strips are less sensitive for 3-methyl fentanyl or Carfentanil, compared to fentanyl. We do our best to keep our testing solution in an ideal concentration window and as thoroughly mixed as possible to help mitigate this. Sometimes, the test strip is too difficult to interpret, or the test strip does not function with certain substances. We log these as **invalid**.