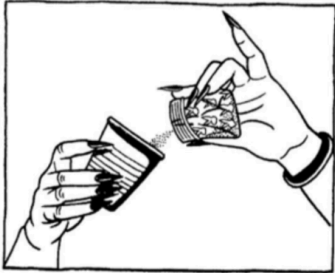
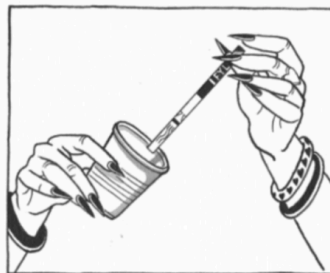


MADDS Test Strip Procedure Updated March 2024

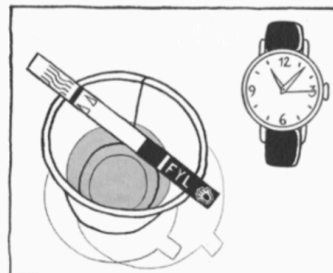
DRUG CHECKING FOR FENTANYL



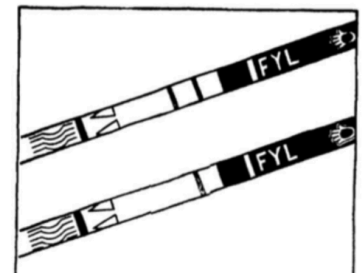
Take a bit of the product and put it in a container with an ounce (shot) of water



Dip the strip into the water for 15 seconds (just up to the blue line)



Set the strip on a horizontal surface and wait 5 minutes



Two lines – negative
One line – positive – have a plan and have Narcan!

- Hold from the solid blue end and dip the other side with the wavy blue lines into the water, don't submerge past the solid blue line!
- Use sample cups with mL markings.
- Can use multiple strips (benzo, fentanyl) in the same sample cup if the recommended dilution ratio is the same.
- Dilute based on type of sample and quantity. FTS are very sensitive and don't require a large amount of sample to test. Cooker/cotton/pipe samples have already been diluted and don't require as much water when creating a solution to test. Diluting cooker/cotton/pipe too much can result in false negative results.

1 . BTNX Fentanyl Test Strips

- If a sample is a chunky **powder/crystal**:
Crush and mix the entire sample into a fine powder. Add a small amount of the sample to a plastic cup (approximately 5 mg or one black microscop if available). Add 5 mL of water to the cup. Swirl the solution. Test.
- If a sample is a whole or partial **pill/tablet**:
Crush and mix the pill/tablet into a fine powder. Add a small amount of the sample to a plastic cup (approximately 5 mg or one black microscop if available). Add 5 mL of water to the cup. Swirl the solution. Test.
- If the sample is a **residue** in a cooker/cotton.
Scrape the cooker bottom or squish the cotton to loosen about 1 mg of sample (see images below) - remove the residue from the cooker and place into a cup. Add 1 mL* of water. Gently tilt the cup and swirl the solution. Test.



- If a sample is a **residue** and not in a cooker (e.g. baggie with very little sample):
Add approximately 1 mg of sample to a cup. Add 1 mL* of water to the cup. Gently tilt the cup and swirl the solution. Test.

*1 mL of water = use a 1 mL syringe = Covers about $\frac{2}{3}$ of the bottom of the cooker when flat (image below)



Only add water directly to the cooker/baggie with residue as a last resort! This method will prevent any further testing (i.e. FTIR, GC-MS, LC/QToF, etc.).

Methamphetamine, MDMA, and diphenhydramine are known to cause false positives with FTS at the 5 mL concentration, diluting to 30 mL will most likely remove the false positive.

- If testing a suspected meth sample that is positive at 5mL, or if you receive an unexpected positive result on a sample suspected to be a non-opioid, dilute to 30 mL and use another FTS on the same sample cup.

2. Xylazine Test Strips

Procedure for testing suspected opioids for xylazine:

1. Crush and mix entire sample into a fine powder
2. Add 5 mg or 1 black microscop of sample to a plastic medicine cup
3. Add 1 mL of water to the cup
4. Swirl the solution until dissolved
5. Test with BTNX XTS (at 5 mg in 1 mL of water) and interpret results

If negative on BTNX XTS, continue with steps below:

6. Add 4 mL of water, so total volume of 5 mL
7. Test with DTM cassette (at 5 mg in 5 mL of water) and interpret results
8. If desired, this concentration is viable to now test with FTS (at 5 mg in 5 mL of water) and interpret results

Look closely! Sometimes the second line on BTNX XTS is very faint, any second line indicates a negative result.

If the sample is suspected to be cocaine/crack/meth/MDMA, test 10-15 mg of sample per 1 mL of water for BTNX XTS. Do not use this solution to test with FTS.

Remember: There is always the risk for false results and a negative test strip result is not always reliable. Xylazine may still be present even with a negative result. We do not recommend using BTNX XTS to test residue or remnant drug (like cooker residue, used baggie/wax fold) at this time due to test strip performance.

3. BTNX Benzo Test Strips

- If a sample is a whole or partial **pill/tablet or suspected Benzo**:

Crush and mix the pill/tablet into a fine powder. Add a small amount of sample (approximately 5 mg or one black microscop if available) to 2 mL of water. Be sure to **mix thoroughly, shake vigorously in a microcentrifuge tube, or use warm water** to dissolve the sample. Test.

What types of samples to test?

- Any pill or pill remnant samples
- Any sample suspected to have benzo in it as shared by the participant

BTNX Test Strip Detectable Benzos (300 ng/mL):

- Oxazepam (300), Alprazolam (125), Bromazepam (625), Chlordiazepoxide (2500), Clobazam (63), Clonazepam (2500), Clorazepate (3300), Desalkylflurazepam (250), Diazepam (250), Estazolam (5000), Flunitrazepam (375), Flurazepam (>10,000), Lorazepam (1250), Lormetazepam (1250), Medazepam (>100,000), Midazolam (>100,000), Nitrazepam (25,000), NorChlordiazepoxide (250), Nordiazepam (500), Prazepam (>100,000), Temazepam (63), Triazolam (5000).

For more information look here: <https://substance.uvic.ca/blog/benzodiazepine-strips/>

Form	Type	Dilution	Result	Next Step	Final Interpretation
FTS Powder, Crystal, Rock ≥ 5 mg	Suspected Opioid	5 mg / 5 mL	+	True +, Further Dilution Not Needed	Positive
			-	True -, Further Dilution Not Needed	Negative
	Suspected Non Opioid	5 mg / 5mL	+	Likely False +, Dilute to 30 mL, Retest*	Positive at 5 and 30mL = + Positive at 5 and Negative at 30mL = -
			-	True -, Further Dilution Not Needed	True Negative
FTS Residue, Cooke, Cotton, Pipe ≤ 1 mg	Suspected Opioid	1 mg / 1mL	+	True +, Further Dilution Not Needed	Positive
			-	True -, Further Dilution Not Needed	Negative
	Suspected Non Opioid	1 mg / 1mL	+	False +, Dilute to 5 mL, Retest*	Positive at 1 and 5mL = + Positive at 1mL and Negative at 5mL = -
			-	True -, Further Dilution Not Needed	Negative
BTS Pill (Whole or Part)	Suspected Benzo	5 mg / 2 mL	+	True +, Further Dilution Not Needed	Positive
		5 mg / 2 mL	-	True -, Further Dilution Not Needed	Negative
XTS Powder, Crystal, Rock	Suspected Opioid	5mg / 1mL	+	True + , Further Dilution Not Needed	Positive
			-	If the second line indicating - is faint, add a second microscop (10mg/1mL), Retest	Two strong red lines = - Faint lines = possibility of xylazine, utilize FTIR Spectroscopy if possible.