Medix Biochemica

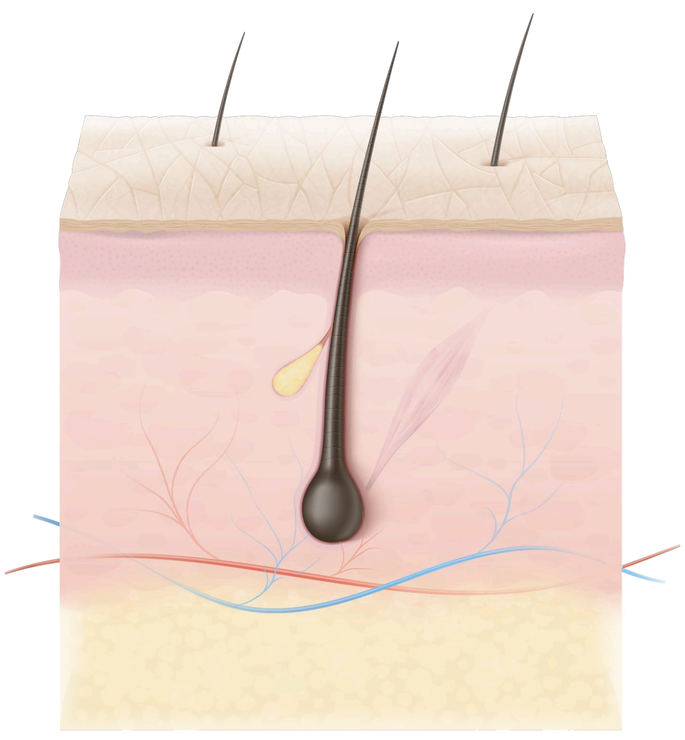
The Key Advantages And Limitations Of Three Types Of Drug Tests







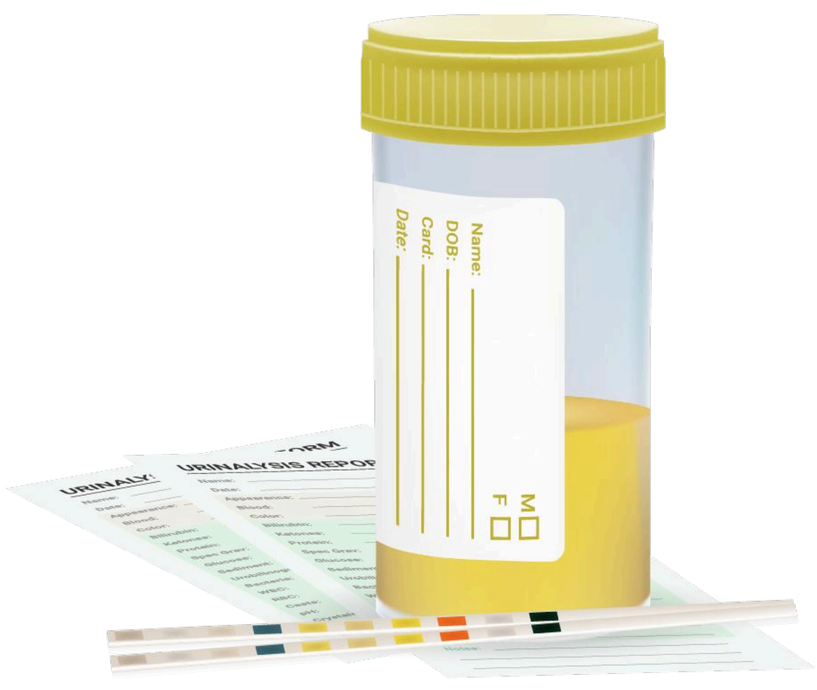
Hair Drug Testing



Advantages	Limitations
Collection is non-biohazardous and observable (preventing tampering)	Tests may reflect environmental contamination (e.g. cannabis smoke residue on hair oil), leading to false positives
Long detection window, up to ~90 days	Melanin content and hair color can affect results, leading to false positives
Useful for identifying chronic or historical drug use (e.g. employment or probation checks)	Does not reliably detect use in the past few hours or days
	Lab analysis is relatively expensive, usually requiring sensitive gas chromatography/mass spectrometry (GC–MS) confirmation

Urine Drug Testing

Advantages	Limitations
Mature and well-established testing technique	Shorter detection window, ~1–3 days after a single use (heavy users may test positive for weeks)
Inexpensive	Invasive collection procedure
Standardized	Samples can be diluted or substituted unless directly observed
Can be run quickly	Urine shows use, not impairment, and heavy chronic users can have lingering positives even when sober
	Cannot provide real-time data and only indicates use in the recent past



Saliva Drug Testing



Advantages	Limitations
Collection is non-biohazardous, non-invasive and observable (preventing tampering)	Short detection window, cannot reveal chronic or past use beyond 1–2 days
Immediate detection, peaking up to 24-48 hours after consumption	Samples can be affected by factors like dry mouth or recent eating/drinking
Useful for impairment screening (detecting very recent use)	The concentration of THC in oral fluid may be low
Suitable for onsite or roadside checks	
Can be highly sensitive and sophisticated	