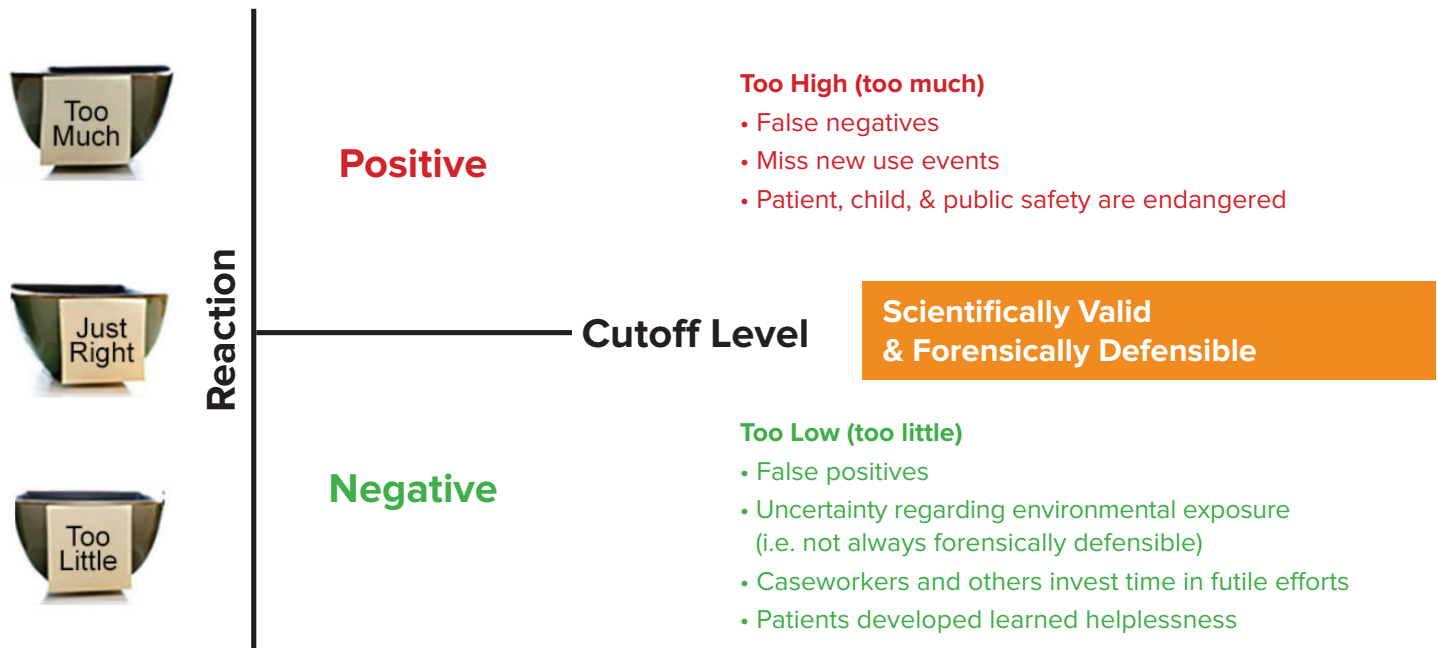


Cutoff Levels

With very few exceptions, drug test levels should only be compared to a cutoff to determine whether a sample is positive or negative. A sample that produces a drug test below the cutoff is deemed negative, while a sample that produces a drug test at or above the cutoff is deemed positive. Cutoff levels are determined by:

- Use case
- Scientific validity
- Forensic defensibility
- Sample type

GOLDBLOCKS—GETTING CUTOFF LEVELS JUST RIGHT



CUT-OFF LEVELS BY SPECIMEN TYPE, ASSAY, DETECTION WINDOW

Urine Common Substances

Assay	Detection Window	Screening Cutoff	Confirmation Cutoff
Amphetamines	3 days	500 ng/mL	100 ng/mL
Barbiturates	1-2 days	200 ng/mL	50 ng/mL
Benzodiazepines	1-7 days	200 ng/mL	50 ng/mL
Buprenorphine	3 days	10 ng/mL	25 ng/mL
Cocaine	<1 day	300 ng/mL	50 ng/mL
Non-Synthetic THC	3-5 days	20 ng/mL	5 ng/mL
Synthetic Cannabinoids	1-2 days	15 ng/mL	5 ng/mL
Ketamine	1-2 days	100 ng/mL	50 ng/mL
Methadone	1-2 days	200 ng/mL	25 ng/mL
Methamphetamine	3 days	500 ng/mL	100 ng/mL
Opiates	1-3 days	300 ng/mL	50 ng/mL
Oxycodone	1-2 days	100 ng/mL	50 ng/mL
Tramadol	1 day	200 ng/mL	50 ng/mL

*nanogram per milliliter of urine

Oral Fluid Common Substances

Assay	Detection Window	Screening Cutoff	Confirmation Cutoff
Amphetamines	2 days	12.5 ng/mL	10 ng/mL
Benzodiazepines	3 days	5 ng/mL	5 ng/mL
Buprenorphine	2 days	1.25 ng/mL	5 ng/mL
Cocaine	<1 day	5 ng/mL	5 ng/mL
Methadone	1-2 days	12 ng/mL	5 ng/mL
Methamphetamine	2 days	12.5 ng/mL	10 ng/mL
Opiates	1-2 days	10 ng/mL	5 ng/mL
Oxycodone	1 day	10 ng/mL	5 ng/mL
Phencyclidine	5-7 days	2.5 ng/mL	5 ng/mL
Cannabinoids (THC)	1-2 days	2 ng/mL	2 ng/mL

*nanogram per milliliter of oral fluid

Hair Common Substances

Assay	Detection Window	Screening Cutoff	Confirmation Cutoff
Amphetamines	30 to 90 days**	200 pg/mg	200 pg/mg
Benzodiazepines	30 to 90 days	50 pg/mg	50 pg/mg
Cannabinoids (THC)	30 to 90 days	10 pg/mg	10 pg/mg
Cocaine	30 to 90 days	100 pg/mg	100 pg/mg
Methamphetamine	30 to 90 days	200 pg/mg	200 pg/mg
Opiates	30 to 90 days	100 pg/mg	100 pg/mg
Oxycodone	30 to 90 days	100 pg/mg	100 pg/mg

**picogram per milligram of hair