

TABLE 1

Table 1 shows the medications for which official “*thresholds*,” “*limits*,” or “*decision levels*,” have been established in certain racing jurisdictions. The “*thresholds*” are expressed in terms of concentrations (ng/ml) in particular body fluids. The reference number at the right indicates where the information about a particular agent can be found. Consult the References/Sources section at the end of this booklet.

“THRESHOLDS,” “LIMITS,” “DECISION LEVELS”

	<u>MEDICATION</u>	<u>CONCENTRATION</u>	<u>FLUID</u>	<u>JURISDICTIONS</u>	<u>Reference</u>
1	Acepromazine	25 ng/ml	urine	Ohio	12
	Acepromazine	25 ng/ml	urine	California	4
	Acepromazine	25 ng/ml	urine	Washington	21
	Acepromazine	25 ng/ml	urine	New Mexico	29
2	Albuterol	1 ng/ml	urine	California	4
	Albuterol	1 ng/ml	urine	New Mexico	29
3	Arsenic	200 ng/ml	urine	Texas	30
	Arsenic	300 ng/ml	urine	International	9
4	Atropine	10 ng/ml	urine	California	4
	Atropine	10 ng/ml	urine	New Mexico	29
5	Benzocaine	50 ng/ml	urine	California	4
	Benzocaine	50 ng/ml	urine	Washington	21
	Benzocaine	50 ng/ml	urine	New Mexico	29
6	BZE* (Benzoylecgonine)	50 ng/ml	urine	Unattributed	3
	BZE (Benzoylecgonine)	150 ng/ml	urine	Ohio	12
	BZE (Benzoylecgonine)	150 ng/ml	urine	Louisiana	11
7	Betamethasone	60 ng/ml	urine	Ohio	12
8	Bupivacaine	5 ng/ml	urine	Ohio	12
	Bupivacaine	5 ng/ml	urine	Washington	21
9	Butorphanol	10 ng/ml	urine	Ohio	12

10	Caffeine	250 ng/ml	serum	Canada	21
	Caffeine	1,000 ng/ml	urine	Canada	21
	Caffeine	10 ng/ml	plasma	Hong Kong	17
	Caffeine	10 ng/ml	plasma	Jockey Club of Brasileiro	10
	Caffeine	30 ng/ml	urine	Hong Kong	17
	Caffeine	100 ng/ml	urine	Ohio	12
	Caffeine	100 ng/ml	urine	Louisiana	11
	Caffeine	100 ng/ml	urine	Washington	21
11	Carbon Dioxide	37 millimoles/ml	plasma	International	9
12	Clenbuterol	1 ng/ml	urine	Ohio	12
	Clenbuterol	5 ng/ml	urine	Washington	21
	Clenbuterol	5 ng/ml	urine	California	4
13	Dantrolene	100 ng/ml	plasma	Ohio	12
14	Dexamethasone	60 ng/ml	urine	Ohio	12
15	Dimethylsulfoxide	10,000 ng/ml	urine	Ohio	12
	Dimethylsulfoxide	15,000 ng/ml	urine	International	9
	Dimethylsulfoxide	1,000 ng/ml	plasma	International	9
16	Dipyrrone	1,000 ng/ml	plasma	Jockey Club of Brasileiro	10
17	Flumethasone	10 ng/ml	urine	Ohio	12
18	Flunixin	500 ng/ml	plasma	California	4
	Flunixin	500 ng/ml	plasma	California	4a
	Flunixin	10 ng/ml	plasma	Pennsylvania	14
	Flunixin	100 ng/ml	plasma	Ohio	12
	Flunixin	40 ng/ml	urine	Sweden	21
	Flunixin	100 ng/ml	plasma	Idaho	27
	Flunixin	1,000 ng/ml	plasma	New Mexico	29
19	Furosemide	50 ng/ml	plasma	Oklahoma	17
	Furosemide	100 ng/ml	plasma	Others	3
	Furosemide	100 ng/ml	plasma	Jockey Club of Brasileiro	10
	Furosemide	60 ng/ml	plasma	Illinois	28
	Furosemide	100 ng/ml	plasma	Texas	30
20	Glycopyrrolate	5 ng/ml	urine	Ohio	12
21	Hydrocortisone	1,000 ng/ml	urine	Ohio	12
	Hydrocortisone	1,000 ng/ml	urine	International	9

22	Imipramine	20 ng/ml	plasma	Jockey Club of Brasileiro	10
23	Indomethacin	50 ng/ml	plasma	Jockey Club of Brasileiro	10
24	Isoflupredone	60 ng/ml	urine	Ohio	12
25	Isoxsuprine	1,000 ng/ml	urine	Ohio	12
26	Ketoprofen	100 ng/ml	plasma	Ohio	12
	Ketoprofen	50 ng/ml	plasma	California	4
27	Lidocaine	25 ng/ml	plasma	Jockey Club of Brasileiro	10
	Lidocaine	50 ng/ml	urine	Ohio	12
	Lidocaine	50 ng/ml	urine	Washington	21
	Lidocaine	25 ng/ml	urine	Louisiana	11
28	Meclofenamic Acid	1,000 ng/ml	plasma	Ohio	12
	Meclofenamic Acid	1,000 ng/ml	plasma	New Mexico	29
	Meclofenamic Acid	2,500 ng/ml	plasma	USA Equestrian	33
	Mechlosenamic Acid	1,000 ng/ml	blood	Idaho	27
29	Mephenesin	200 ng/ml	plasma	Jockey Club of Brasileiro	10
30	Mepivacaine	5 ng/ml	urine	Ohio	12
	Mepivacaine	10 ng/ml	urine	California	4
	Mepivacaine	10 ng/ml	urine	Washington	21
	Mepivacaine	10 ng/ml	urine	New Mexico	29
31	Methocarbamol	1,000 ng/ml	plasma	Ohio	12
32	Methoxytramine	4,000 ng/ml	urine	International	9
33	Methylprednisolone	1,000 ng/ml	urine	Ohio	12
34	Morphine	110 ng/ml	urine	HFL	25
	Morphine	50 ng/ml	urine	Ohio	12
	Morphine	75 ng/ml	urine	Louisiana	11
35	Naproxen	5,000 ng/ml	blood	Idaho	27
36	Oxyphenbutazone	5,000 ng/ml	plasma	North America (ARCI)	1
	Oxyphenbutazone	5,000 ng/ml	plasma	Ohio	12
	Oxyphenbutazone	5,000 ng/ml	plasma	Louisiana	11
	Oxyphenbutazone	5,000 ng/ml	blood	Idaho	27
	Oxyphenbutazone	165,000 ng/ml	urine	Louisiana	11

37	Pentazocine	50 ng/ml	urine	Ohio	12
38	Phenylbutazone	5,000 ng/ml	Plasma	North America (ARCI)	1
	Phenylbutazone	700 ng/ml	Plasma	Jockey Club of Brasileiro	10
	Phenylbutazone	5,000 ng/ml	Plasma	Arizona	
	Phenylbutazone	5,000 ng/ml	Plasma	Colorado	
	Phenylbutazone	5,000 ng/ml	Plasma	Florida	
	Phenylbutazone	5,000 ng/ml	Plasma	Indiana	
	Phenylbutazone	5,000 ng/ml	Plasma	Kansas	
	Phenylbutazone	5,000 ng/ml	Plasma	Louisiana	11
	Phenylbutazone	5,000 ng/ml	Plasma	Michigan	
	Phenylbutazone	5,000 ng/ml	Plasma	Montana	
	Phenylbutazone	5,000 ng/ml	Plasma	Nebraska	
	Phenylbutazone	5,000 ng/ml	Plasma	Ohio	
	Phenylbutazone	5,000 ng/ml	Plasma	Oklahoma	
	Phenylbutazone	5,000 ng/ml	Plasma	Oregon	
	Phenylbutazone	5,000 ng/ml	Plasma	Washington	
	Phenylbutazone	5,000 ng/ml	Plasma	West Virginia	
	Phenylbutazone	5,000 ng/ml	Plasma	Wyoming	30
	Phenylbutazone	5,000 ng/ml	Plasma	Texas	4
	Phenylbutazone	5,000 ng/ml	Plasma	California	14
	Phenylbutazone	5,000 ng/ml	Plasma	Pennsylvania	29
	Phenylbutazone	5,000 ng/ml	Plasma	New Mexico	27
	Phenylbutazone	5,000 ng/ml	blood	Idaho	11
	Phenylbutazone	3,000 ng/ml	Plasma	Arkansas	
	Phenylbutazone	3,000 ng/ml	Plasma	Minnesota	
	Phenylbutazone	2,600 ng/ml	Plasma	Delaware	
	Phenylbutazone	2,600 ng/ml	Plasma	Maryland	
	Phenylbutazone	2,600 ng/ml	Plasma	New Jersey	
	Phenylbutazone	2,600 ng/ml	Plasma	Virginia	
	Phenylbutazone	2,200 ng/ml	Plasma	Iowa	
	Phenylbutazone	2,000 ng/ml	Plasma	Illinois	
	Phenylbutazone	165,000 ng/ml	Urine	Louisiana	27
	Phenylbutazone	165,000 ng/ml	Urine	Idaho	11
39	Prednisolone	1,000 ng/ml	Urine	Ohio	12
40	Prednisone	100 ng/ml	urine	Ohio	12
41	Procaine	750 ng/ml	urine	Hong Kong	8
	Procaine	25 ng/ml	plasma	Canada	17
	Procaine	20 ng/ml	plasma	Pennsylvania	14
	Procaine	100 ng/ml	plasma	Jockey Club of Brasileiro	10
	Procaine	50 ng/ml	urine	Ohio	12
	Procaine	10 ng/ml	urine	California	4
	Procaine	25 ng/ml	urine	Washington	21

	Procaine	10 ng/ml	urine	New Mexico	29
42	Promazine	20 ng/ml	plasma	Jockey Club of Brasileiro	10
	Promazine	50 ng/ml	urine	Ohio	12
	Promazine	25 ng/ml	urine	California	4
	Promazine	25 ng/ml	urine	Washington	21
	Promazine	25 ng/ml	urine	New Mexico	29
43	Pyrilamine	5 ng/ml	plasma	Jockey Club of Brasileiro	10
	Pyrilamine	50 ng/ml	plasma	Ohio	12
44	Salicylates	750,000 ng/ml	urine	California	4
	Salicylates	750,000 ng/ml	urine	Washington	21
	Salicylates	750,000 ng/ml	urine	Ohio	12
	Salicylates	750,000 ng/ml	urine	New Mexico	29
	Salicylates	750,000 ng/ml	urine	Texas	
45	Salicylic Acid	7,500 ng/ml	urine	Ohio	12
	Salicylic Acid	750,000 ng/ml	urine	International	9
	Salicylic Acid	6,500 ng/ml	plasma	International	9
	Salicylic Acid	750,000 ng/ml	urine	Texas	30
46	Terbutaline	10 ng/ml	urine	Ohio	12
47	Testosterone	20 ng/ml (geldings)	urine	International	9
	Testosterone (epitestosterone)	55 ng/ml (fillies & mares)	urine	International	9
48	Tetramisole	80 ng/ml	plasma	Jockey Club of Brasileiro	10
49	Theobromine	2,000 ng/ml	urine	Ohio	12
	Theobromine	2,000 ng/ml	urine	International	9
	Theobromine	2,000 ng/ml	urine	Texas	30

*BZE is the major urinary metabolite of cocaine.

For comparative purposes, the “thresholds” for human urine concentrations, as established by the Department of Health and Human Services’ Substance Abuse and Mental Health Services Administration (SAMHSA), are listed below.

NB: The opiate testing cutoff concentrations were increased, effective December 1, 1998, from 300 ng/ml to 2,000 ng/ml.

	Marijuana metabolite ¹	15 ng/ml	urine	SAMHSA	23
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Cocaine metabolite ²	150 ng/ml	urine	SAMHSA	23
Morphine	2,000 ng/ml	urine	SAMHSA	24
Codeine	2,000 ng/ml	urine	SAMHSA	24
6-Acetylmorphine ⁴	10 ng/ml	urine	SAMHSA	24
Phencyclidine	25 ng/ml	urine	SAMHSA	23
Amphetamine	500 ng/ml	urine	SAMHSA	23
Methamphetamine ³	500 ng/ml	urine	SAMHSA	23

1: Delta-9-tetrahydrocannabinol-9-carboxylic acid

2: Benzoylcegonine

3: Specimen must also contain amphetamine at a concentration > 200 ng/ml

4: Test for 6-AM when the morphine concentration exceeds 2,000 ng/ml