

Statistical Trends in Workplace Drug Testing 2003-2007

R. H. Barry Sample, Ph.D.

Director of Science and Technology

Employer Solutions

Quest Diagnostics Incorporated

Agenda

- What is the Drug Testing Index (DTI)?
- Overall “Positivity”
- “Non-Negative” Results for Drugs
 - Positivity by Testing Reason
- Positivity by Drug
- Questions and Comments

Drug Testing Index[®]

- Groups
 - Federally-Mandated Safety Sensitive (FMSS)
 - General Workforce (GW)
- Data Source
 - Workplace
 - Rehab/CJ excluded
 - POCT Confirms excluded
 - Excludes high positivity
- Data Elements
 - Drugs
 - Testing Reason
- <http://www.questdiagnostics.com/employersolutions/>

Overall Positivity Combined Workforce

Year	%
1988	13.6
1989	12.7
1990	11.0
1991	8.8
1992	8.8
1993	8.4
1994	7.5
1995	6.7
1996	5.8
1997	5.0

Year	%
1998	4.8
1999	4.6
2000	4.7
2001	4.6
2002	4.4
2003	4.5
2004	4.5
2005	4.1
2006	3.8
2007	3.8

Overall Positivity

Federally-Mandated Safety-Sensitive / General Workforce

Year	Federally-mandated, %	General workforce, %
1995	3.4	7.5
1996	3.6	6.4
1997	3.5	5.2
1998	3.4	5.0
1999	3.2	4.8
2000	3.1	4.9
2001	2.9	4.9

Year	Federally-mandated, %	General workforce, %
2002	2.5	4.8
2003	2.4	5.0
2004	2.3	4.9
2005	2.3	4.5
2006	2.0	4.4
2007	1.8	4.4

Pre-Employment Positivity Rates

Year	Federally- mandated, %	General workforce, %
2003	2.9	4.1
2004	2.7	4.1
2005	2.6	3.9
2006	2.3	3.9
2007	2.0	3.9

Random Positivity Rates

Year	Federally- mandated, %	General workforce, %
2003	1.9	6.6
2004	1.8	7.1
2005	1.8	6.6
2006	1.5	5.5
2007	1.5	5.7

Post-Accident Positivity Rates

Year	Federally- mandated, %	General workforce, %
2003	3.1	5.7
2004	2.9	5.7
2005	3.0	5.8
2006	2.7	5.7
2007	2.6	5.8

Percent of Specimens Tested by Testing Reason, 2001-2007

Testing reason	FMSS (N=9.1 million)	GW (N=39 million)
Pre- Employment	46%	78%
Random	43%	10%
Post-Accident	4%	6%
Other	7%	7%

Amphetamines Positivity Rates

Year	Federally- mandated, %	General workforce, %
2003	0.29	0.49
2004	0.31	0.52
2005	0.35	0.48
2006	0.28	0.42
2007	0.25	0.44

Amphetamine Class Positivity

Amphetamine

Year	Federally-mandated, %	General workforce, %
2003	0.22	0.41
2004	0.24	0.45
2005	0.44	0.44
2006	0.31	0.38
2007	0.21	0.40

Methamphetamine

Year	Federally-mandated, %	General workforce, %
2003	0.22	0.32
2004	0.23	0.33
2005	0.40	0.28
2006	0.25	0.18
2007	0.13	0.14

Opiates Positivity Rates

Year	Federally-mandated, %	General workforce, %
2003	0.19	0.34
2004	0.17	0.32
2005	0.18	0.32
2006	0.17	0.32
2007	0.18	0.35

Opiates Positivity by Testing Reason

Year	Federally-mandated, Pre-employment, %	Federally-mandated, Post-accident, %	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	0.11	0.45	0.17	0.77
2004	0.10	0.46	0.18	0.84
2005	0.10	0.44	0.19	0.84
2006	0.10	0.50	0.19	0.85
2007	0.12	0.55	0.20	0.92

“Expanded” Opiates Class Positivity (General Workforce)

Drug	2003	2004	2005	2006	2007
N (thousands)	153	264	299	344	466
Codeine	0.20%	0.24%	0.24%	0.21%	0.19%
Morphine	0.36%	0.39%	0.46%	0.38%	0.42%
Hydrocodone	0.57%	0.85%	0.91%	0.99%	1.23%
Hydromorphone	0.19%	0.37%	0.44%	0.51%	0.71%

Oxycodone Positivity Rates

Year	General workforce, %
2003	--
2004	--
2005	0.56
2006	0.64
2007	0.88

Oxycodone Positivity by Testing Reason

Year	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	--	--
2004	--	--
2005	0.4	1.1
2006	0.4	1.3
2007	0.5	1.6

Barbiturate Positivity Rates

Year	General workforce, %
2003	0.29
2004	0.27
2005	0.25
2006	0.23
2007	0.24

Barbiturates Positivity by Testing Reason

Year	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	0.26	0.33
2004	0.24	0.33
2005	0.22	0.31
2006	0.21	0.31
2007	0.22	0.30

Benzodiazepine Positivity Rates

Year	General workforce, %
2003	0.60
2004	0.58
2005	0.58
2006	0.62
2007	0.67

Benzodiazepine Positivity by Testing Reason

Year	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	0.41	0.705
2004	0.415	0.75
2005	0.43	0.74
2006	0.48	0.815
2007	0.515	0.87

Methadone Positivity Rates

Year	General workforce, %
2003	0.20
2004	0.21
2005	0.23
2006	0.22
2007	0.23

Methadone Positivity by Testing Reason

Year	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	0.11	0.14
2004	0.13	0.15
2005	0.15	0.17
2006	0.15	0.20
2007	0.16	0.24

Propoxyphene Positivity Rates

Year	General workforce, %
2003	0.67
2004	0.63
2005	0.57
2006	0.55
2007	0.58

Propoxyphene Positivity by Testing Reason

Year	General workforce, Pre-employment, %	General workforce, Post-accident, %
2003	0.49	1.46
2004	0.46	1.36
2005	0.40	1.09
2006	0.42	1.18
2007	0.44	1.30

Questions and Comments