

Alcohol Tester and Drug Tester Equipment: Market Shares, Strategies, and Forecasts, Worldwide, 2019-2025

Table of Contents

Alcohol Tester and Drug Tester Equipment Executive Summary

The study is designed to give a comprehensive overview of the Alcohol Testing and Drug Testing market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

Alcohol Tester and Drug Tester Equipment Market Description and Market Dynamics

Table of Contents	
ALCOHOL AND DRUG TESTERS EXECUTIVE SUMMARY	24
Alcohol Breathalyzer and Drug Testing Market Driving Forces	24
Alcohol Usage Problem In The Workplace	26
Alcohol Testing Market Shares	28
Alcohol Testing Market Shares	28
Drug Testing Equipment Market Shares	30
1. ALCOHOL AND DRUG TESTING MARKET DESCRIPTION AND MARKET DYNAMICS	31
1.1 Impact of Alcohol	31

Alcohol Testing and Drug Testing:**Table of Contents and List of Tables and Figures**

1.1.1. BAC	31
1.2 Breathalyzer	32
1.2.1 Breathalyzer Applications	32
1.3 DUI Offenses	33
1.3.1 Sports Fans Drunk at Games 8%	33
1.3.2 Personal Breathalyzer	33
1.3.3 Indicators To Spot Potential Drunk Drivers	34
1.4 Breathalyzer	35
1.4.1 Mis-Calibrated Equipment	37
1.4.2 Law Enforcement	39
1.4.3 Consumer Use	39
1.4.4 Breath Test Evidence	40
1.4.5 Hosting Parties, And Celebrating	40
1.5 Demand For More Effective Detection Of Alcohol Impairment	41
1.5.1 Traditional Alcohol Breath Analyzer Testing	41
1.5.2 Breath Alcohol Analysis	42
1.5.3 Alcohol Merges with Breath	43
1.5.4 Analyze An Alveolar Or Deep Lung Air	44
1.6 Alcohol Is A Drug	45
1.7 Laws Prohibit Driving With An Elevated BAC	45
1.8 Drunk Driving Statistics	46
1.8.1 When Alcohol-Impaired Crashes Occur	59
1.9 Breath to Test for Alcohol Concentrations in the Body	62
1.10 Heart Problems Linked to Heavy Drinking	63
1.10.1 Atrial Defibrillation	63

Copyright 2019, WinterGreen Research, Inc.

TOC-2

www.wintergreenresearch.com
Tel 781-863-5078

www.wintergreenresearch.com/blog
email: info@wintergreenresearch.com

Lexington, Massachusetts

Alcohol Testing and Drug Testing:**Table of Contents and List of Tables and Figures**

1.10.2 Health Insurers Denied Coverage	64
1.11 Synthetic Marijuana Testing	65
1.11.1 K2 and Spice Synthetic Compounds Chemical Structure	65
1.12 Spice Drug	65
1.13 US Military Drug Tests	69
1.13.1 Synthetic Marijuana Often Undetected by Drug Tests for People on Parole or Probation	69
1.13.2 Diagnostic Drug Testing Demonstrated ROI	69
1.14 Biomedical And Chemical Mid-IR SPR Based Sensor	70
1.14.1 Development Of Mid-Infrared Surface Plasmon	71
1.14.2 Sensors Utilizing Surface Plasmon Resonance (SPR)	71
1.14.3 Drug Testing Kit Prices	72
1.15 Miniaturized Mid-Infrared Sensor Technologies Trends	73
1.16 Nanotechnology Is Significant	73
1.16.1 Mid IR Waveguides	76
1.16.2 Miniaturized IR Gas Sensors	76
2. ALCOHOL AND DRUG TESTING MARKET SHARES AND FORECASTS	78
2.1 Alcohol and Drug Testing Market Driving Forces	78
2.1.1 Alternatives to Bars	80
2.1.2 Alcohol and Drug Addicted People	81
2.2 Alcohol Testing Market Shares	81
2.2.1 Alcohol Testing Market Shares	82
2.3 Alcohol Testing Equipment Market Forecasts	86
2.3.1 Alcohol Substance Abuse Testing Breath Detection, Urine And Saliva Equipment	88

Alcohol Testing and Drug Testing:**Table of Contents and List of Tables and Figures**

2.3.2 Alcohol Testing Market Forecasts, Law Enforcement, Workplace, Personal, and Clinical Market Segments,	90
2.4 Drug Testing Equipment Market Shares	93
2.5 Drug Testing Equipment Market Forecasts	97
2.6 Alcohol and Drug Testing Equipment Market	102
2.7 Alcohol and Drug Abuse Market Segment Discussion	107
2.7.1 Workplace Monitoring Capability, Law Enforcement, And Consumer Monitoring	107
2.7.2 Alcohol Usage Problem in The Workplace	107
2.7.3 Drug Testing Markets in An Age of the Opioid Crisis	110
2.7.4 Alcohol Testing Market Description	111
2.7.5 Law Enforcement Alcohol Testing	112
2.7.6 4-1 Personal vs. Professional Law Enforcement Breathalyzer Devices	112
2.7.7 Portable Breath Testers In Law Enforcement	113
2.7.8 Alcohol Testing Technology In The Workplace	114
2.8 Breathalyzer Prices	116
2.8.1 Portable Breath Testers Utilize Fuel Cell Technology	116
2.8.2 Dräger Alcotest® 9510	119
2.8.3 AK Solutions Fuel Cell and Other Breathalyzer Prices	119
2.8.4 AK Solutions AlcoScan AL2500 Prices	121
2.8.5 Personal Breathalyzer Keychains	122
2.8.6 Personal Breathalyzer	123
2.8.7 Home Breathalyser Prices :	124
2.9 Alcohol Breathalyzer and Drug Testing Regional Analysis	132
2.9.1 U.S.	133

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

2.9.2	Germany	134
2.9.3	U.K.	134
3.	ALCOHOL AND DRUG TESTING	135
3.1	Fundamental Principle Of Breath Analysis	135
3.1.1	Relationship Between The Blood And Breath Alcohol Concentrations In Equilibrium	137
3.1.2	Testing for Alcohol: Fuel Cell Sensor Breath Analysis	138
3.1.3	Testing for Alcohol: Infrared Analysis	141
3.1.4	Draeger Machine Measures The Temperature Of The Subject's Breath And Then Adjusts The Results	143
3.1.5	Forensic Breath-Alcohol Testing Quality Assurance	144
3.2	Bio Sensors Detection	145
3.2.1	Sensors Utilizing Surface Plasmon Resonance (SPR)	145
3.2.2	Clinical Niche for Breath Tests	146
3.2.3	Heart Problems Linked to Heavy Drinking	147
3.2.4	Atrial Defibrillation	147
3.2.5	Health Insurers Denied Coverage	148
3.3	Fuel Cell Technology vs. Semiconductor Technology	149
3.4	Proposed DWI Changes	149
3.5	DUI Offenses	149
3.5.1	Sports Fans Drunk at Games 8%	150
3.5.2	Personal Breathalyzer	150
3.5.3	Indicators To Spot Potential Drunk Drivers	150
3.5.4	Breathalyzer Applications	151
3.5.5	Keychain Breathalyzer	152

Alcohol Testing and Drug Testing:**Table of Contents and List of Tables and Figures**

3.5.6	BAC	153
3.5.7	Mis-calibrated Equipment	154
3.5.8	Drunk Driving Law Enforcement	154
3.5.9	Breath Alcohol Analyzers Consumer Use	154
3.5.10	Breath Test Evidence	155
3.5.11	Hosting Parties, And Celebrating	155
3.5.12	Demand For More Effective Detection Of Alcohol Impairment	156
3.5.13	Traditional Alcohol Breath Analyzer Testing	156
3.5.14	Breath Alcohol Analysis	157
3.5.15	Alcohol Merges with Breath	158
3.5.16	Analyze An Alveolar Or Deep Lung Air	159
3.5.17	Alcohol Is A Drug	159
3.5.18	Laws Prohibit Driving With An Elevated BAC	160
3.6	Spice Drug Testing	161
3.6.1	Spice Drug Information	163
3.7	Breath Sampling Challenges	163
3.7.1	Testing Breath	164
3.8	Science Behind Breath Alcohol Analyzers	164
3.8.1	Non-Specific Analysis	167
3.8.2	Interfering Compounds	168
4.	BREATHALYZER PRODUCT EXAMPLES	171
4.1	Breathalyzers	171
4.1.1	Dräger SSK 5000	173
4.1.2	Dräger Alcotest® Tubes	174
4.2	Draeger Breathalyzer	175

4.3 MPD	179
5. BREATH ANALYZER, SALIVA TESTERS, BIO-SENSOR TECHNOLOGY AND INTERNATIONAL REGULATIONS	180
5.1 European Convention on Human Rights	180
5.1.1 Chez Republic	183
5.1.2 Denmark	184
5.1.3 Germany	185
5.1.4 Estoia	186
5.1.5 Greece	187
5.1.6 Spain	188
5.1.7 France	189
5.1.8 Ireland	190
5.1.9 Italy	191
5.1.10 Cyprus	192
5.1.11 Latvia	193
5.1.12 Lithuania	194
5.1.13 Luxembourg	197
5.1.14 Hungary	198
5.1.15 Netherlands	198
5.1.16 Austria	201
5.1.17 Portugal	202
5.1.18 Slovenia	203
5.1.19 Slovakia	204
5.1.20 Finland	205
5.1.21 Sweden	206
5.1.22 Norway	207

Alcohol Testing and Drug Testing:**Table of Contents and List of Tables and Figures**

5.1.23 European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)	208
5.2 China	208
5.3 US Drug Regulations	210
5.3.1 Types of Drug Testing in California	211
5.3.2 US Pre-employment Drug and Alcohol Testing of Job Applicants	212
5.3.3 US Drug Testing of Current Employees	212
5.4 US 2014 Drunk Driving Standards	215
5.4.1 When Alcohol-Impaired Crashes Occur	222
5.4.2 Breath to Test for Alcohol Concentrations in the Body	225
5.5 Employers Need Clear Policies That Articulate A Drug Testing Policy	226
5.6 Draeger Criminal Justice Through Installing An Ignition Interlock Device (IID) 226	
5.7 US Drug Testing Laws by State	227
5.8 Worldwide Drunk Driver Penalties	230
5.8.1 Breaathalyzer Regulations	248
6. BREATH ANALYZER COMPANY PROFILES	249
6.1 Abbott Laboratories	249
6.1.1 Abbott Acquires Alere	253
6.1.2 Abbott Laboratories PRISMnEXT	253
6.1.3 Abbott ARCHITECT c16000	253
6.2 Alcolizer	256
6.2.1 Alcolizer Research, Design & Development	257
6.2.2 Alcolizer Acquisition of OxTo	258
6.2.3 Alcolizer Manufacturing & Service	258
6.2.4 Alcolizer's Products Use Police Grade Fuel Cell Technology	259

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

6.2.5	Alcolizer Industry Drug Testing Programs, Druglizer™, Saliva Based Testing	259
6.2.6	Alcolizer Technology Research & Development	261
6.2.7	Alcolizer Regional Presence	261
6.3	Alcohol Countermeasure Systems ACS	263
6.3.1	ACS Securetec Detektions-Systeme AG Alcolock	263
6.3.2	ACS Alcolock Regional Presence	264
6.3.3	Alcolock™ Commercial Alcohol Interlock Programs	266
6.3.4	ACS Quality Standards	266
6.4	AK Solutions	268
6.4.1	AlcoMate Consumer-Level Products	269
6.4.2	AK Solutions AlcoMate Prestige	269
6.4.3	AK Solutions / AlcoScan	270
6.4.4	AlcoMate AccuCell AL9000 Fuel Cell Breathalyzer	271
6.4.5	AlcoMate Premium AL7000 Breathalyzer	272
6.4.6	AlcoScan AL2500	274
6.4.7	AK Solutions Fuel Cell	276
6.4.8	AlcoScan AL3500 Fuel-Cell Breathalyzers For Commercial Consumers, Vending-Style Money-Acceptor Functionality	276
6.4.9	AK Solutions Portable Breathalyzers	279
6.4.10	AK Solutions Target Markets	280
5.2.4	AK Solutions Revenue	280
6.5	Akers Biosciences	280
6.6	Alcovisor	282
6.7	Alere	282

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

6.8 Applied Nanodetectors	283
6.8.1 Applied Nanodetectors Business Strategy	283
6.9 BACtrack	284
6.10 Bio-Rad Laboratories	285
6.11 CLIAWaived	286
6.12 DOT Breathalyzers	286
6.13 Drägerwerk AG & Co. KGaA	287
6.13.1 Draeger Revenue	287
6.13.2 Dräger Interlock™ 7000	288
6.13.3 Drägerwerk AG & Co. KGaA Revenue	290
6.13.4 Draeger Preventing Alcohol And Drug-Related Accidents	291
6.13.5 Draeger Safety Diagnostics	292
6.14 EBI	292
6.15 Express Diagnostic	293
6.15.1 Personnel Expertise	293
6.16 Intoximeters	294
6.16.1 Intoximeters Revenue	297
6.17 KHN Solutions LLC Bactrack Breathalyzers	298
6.18 Lab Corp	299
6.19 Ladybug Teknologies	299
6.20 Lifeloc Technologies	299
6.20.1 Lifeloc Breathalyzers	300
6.20.2 Lifeloc Revenue	301
6.20.3 Lifeloc Target Markets	303
6.20.4 Lifeloc Installed Base of Breathalyzers	303

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

6.21	MPD / Lion	304
6.21.1	MPD / CMI	304
6.21.2	MPD / CMI	305
6.21.3	MPD / Lion Laboratories	306
6.21.4	MPD / CMI	308
6.21.5	MPD / CMI Alcohol Detection In Workplace	308
6.22	Narcocheck	308
6.22.1	NarcoCheck Positioning	309
6.23	Psychemedic Corporation	311
6.23.1	Psychemedics FDA Clearance	314
6.23.2	Psychemedics Revenue	314
6.24	OmegaPoint Systems	316
6.25	Quest Diagnostics	316
6.25.1	Quest Diagnostics Diagnostic Testing Services	321
6.25.2	Quest Diagnostics Revenue	322
6.26	Randox Laboratories	322
6.27	Rapid Detect Inc.	323
6.28	Rapid Exams	325
6.29	Roche Diagnostics	327
6.30	Sonic Healthcare	327
6.31	TestCountry	329
6.31.1	TestCountry Price Match	331
6.32	Testing Solutions	331
6.32.1	AlcoTester.com	331
6.33	Thermo Fisher Scientific	332
6.33.1	Thermo Fisher Scientific Drugs of Abuse Testing Overview	334

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

6.33.2 Thermo Fisher Scientific Drugs of Abuse Testing Urine Testing	335
6.33.3 Thermo Fisher Scientific Oral Fluid and Other Testing	335
6.34 Tokyoflash	336
6.35 TruTouch	337
6.36 uVera Diagnostics	338
6.37 Selected Breathalyzer and Drug Testing Companies	340
WINTERGREEN RESEARCH,	342
WinterGreen Research Methodology	342
WinterGreen Research Process	344
Market Research Study	344
WinterGreen Research Global Market Intelligence Company	345
List of Tables and Figures	
Figure 1. Alcohol and Drug Testing Driving Forces	25
Figure 2. Typical Drug And Alcohol Company Policy Document	27
Figure 3. Alcohol Testing Market Shares, Dollars, 2018	29
Figure 4. Drug Testing Market Shares, Dollars, Worldwide, 2018	30
Figure 5. Indicators To Spot Potential Drunk Drivers	34
Figure 6. Breathalyzer Device For Estimating Blood Alcohol Content (BAC) Uses	36
Figure 7. Spice Formulations	66
Figure 8. Physical Health Effects for K2 and Spice Synthetic Drug Compounds	68
Figure 9. Psychological Effects for K2 and Spice Synthetic Drug Compounds	68
Figure 10. Drug Testing Kit Prices	72
Figure 11. Mid IR Sensing Systems Components	75
Figure 12. Alcohol and Drug Testing Market Driving Forces	79

Copyright 2019, WinterGreen Research, Inc.

TOC-12

www.wintergreenresearch.com
Tel 781-863-5078

www.wintergreenresearch.com/blog
email: info@wintergreenresearch.com

Lexington, Massachusetts

Table of Contents and List of Tables and Figures

Figure 13. Alcohol and Drug Addicted People Worldwide and US, 2018	81
Figure 14. Alcohol Testing Market Shares, Dollars, 2018	82
Figure 15. Alcohol Breathalyzer and Alcohol Abuse Testing Equipment Market Shares, Dollars, Worldwide, 2018	83
Figure 16. Alcohol Abuse Testing Equipment Market Participation, Worldwide, 2018	84
Figure 17. Alcohol Testing Market Forecasts Dollars, Worldwide, 2019-2025	86
Figure 18. Alcohol Testing Market Forecasts Dollars, Worldwide, 2019-2025	87
Figure 19. Alcohol Testing Segment Market Forecasts, Breath Detection, Urine Analysis, and Saliva Analysis, Dollars, Worldwide, 2019-2024	89
Figure 20. Alcohol Testing Market Forecasts, Law Enforcement, Workplace, Personal, and Clinical Market Segments, Units and Dollars, Shipments, Worldwide, 2019-2025	90
Figure 21. Alcohol Breath Analyzers	92
Figure 22. Drug Testing Market Shares, Dollars, Worldwide, 2018	93
Figure 23. Drug Testing Market Shares, Dollars, Worldwide, 2018	94
Figure 24. Drug Testing Equipment Market Participation, Worldwide, 2018	95
Figure 25. Drug Testing Market Forecasts, Dollars, Worldwide, 2019-2024	97
Figure 26. Drug Testing Market Forecasts, Dollars, Worldwide, 2019-2024	98
Figure 27. Drug Testing Market Forecasts, Law Enforcement, Workplace, Personal, and Clinical Market Segments, Units and Dollars, Shipments, Worldwide, 2019-2025	98
Figure 28. Drug Testing Market Segments, Cannabis, Cannabinoid Synthetic, COC- Cocaine, BZO - Benzodiazepines, Amphetamines, Crystal Meth, OPI - Morphine. Pharmaceutical Grade Substance Abuse, Dollars, Worldwide, 2019-2025	100
Figure 29. Alcohol and Drug Testing Equipment Market Segments, Dollars, Worldwide, 2019-2025	103
Figure 30. Alcohol and Drug Market Segments, Worldwide, Dollars, 2018	104

Figure 31. Alcohol and Drug Market Segments, Worldwide, Dollars, 2025	105
Figure 32. Alcohol and Drug Testing Equipment Market Segments, Dollars, Worldwide, 2019-2025	106
Figure 33. Alcohol and Drug Testing Equipment Market Segments, Percent, Worldwide, 2019-2025	106
Figure 34. Typical Drug And Alcohol Company Policy Document	109
Figure 35. Alcohol Testing Market Description	111
Figure 36. Portable Breath Testers Utilize Fuel Cell Technology	116
Figure 37. Alcoscan AI2500 Prices	121
Figure 38. Alcomate Accucell Prices	122
Figure 39. Alcohol and Drug Testing Regional Market Segments, 2018	132
Figure 40. Alcohol and Drug Testing Regional Market Segments, 2018	133
Figure 41. Fundamental Principle Of Breath Analysis	135
Figure 42. Breath Analysis Gets Information From the Lungs	136
Figure 43. Alcovisor Mark-X Fuel Cell Alcohol Breathalyzer	139
Figure 44. Lion Fuel Cell Technology	141
Figure 45. Lion Intoxilyzer® Operates On The Principle Of Infrared Absorption Spectroscopy For The Analysis Of The Breath Specimen	142
Figure 46. Indicators To Spot Potential Drunk Drivers	151
Figure 47. Synthetic Cannabinoid Chemicals	162
Figure 48. Technologies Used To Test A Breath Sample For Alcohol	166
Figure 49. Types of FDA-Cleared Breath Tests	169
Figure 50. Dräger DrugTest® 5000 System - Analyzer and Test kit	171
Figure 51. Dräger Drug Test® 5000 System Product Benefits	172
Figure 52. Draeger Drug System Tests	173
Figure 53. Draeger SSK 5000 Used For Sampling For Drugs On Or From Surfaces	174

Alcohol Testing and Drug Testing:

Table of Contents and List of Tables and Figures

Figure 54. Draeger Alcotest® Tubes Features	174
Figure 55. Draeger Alcotest® Tubes	174
Figure 56. Dräger Driver Alcohol Interlock™ 7000	176
Figure 57. MPD Products	179
Figure 58. Abbott Laboratories and Subsidiaries Net Sales, First Three Quarters and Third Quarter 2017 and 2018	249
Figure 59. Abbott Laboratories and Subsidiaries Net Sales by Segment, Third Quarter 2017 and 2018	250
Figure 60. Abbott Laboratories and Subsidiaries Net Sales by Segment, First Three Quarters 2017 and 2018	251
Figure 61.	251
Figure 62. Abbott Laboratories and Subsidiaries Net Sales by Regional Segment	252
Figure 63. Alcolizer Testing	260
Figure 64. Alcolizer Wall Mount 4 Breath Tester for Industry	260
Figure 65. Alcolizer Regional Presence	262
Figure 66. AlcoScan Consumer Fuel Cell Breathalyzer	270
Figure 67. AlcoMate AccuCell AL9000 Fuel Cell Breathalyzer Functions	271
Figure 68. AlcoMate AccuCell AL9000 Fuel Cell Breathalyzer Key Features	272
Figure 69. AlcoMate Premium AL7000 Breathalyzer Features	273
Figure 70. AlcoMate Prestige AL6000 Breathalyzer Features	274
Figure 71. Alcoscan AI2500 Breathalyzer Target Markets	275
Figure 72. AK Solutions Alco Products	277
Figure 73. AK Solutions Alco Sensor Modules	279
Figure 74. Akers Biosciences Revenue	281
Figure 75. Draeger Revenue	287
Figure 76. Dräger Interlock™ 7000	289

Table of Contents and List of Tables and Figures

Figure 77. Drager Regional Presence	290
Figure 78. Intoximeters PC Alcohol Testing	296
Figure 79. Lifeloc Breath Analyzer Instruments	303
Figure 80. Lion Key Markets Targeted For Alcohol Deterrence	306
Figure 81. MPD / Lion Target Markets	307
Figure 82. Narcocheck Products	309
Figure 83. NarcoCheck Target Markets:	310
Figure 84. NarcoCheck Testing Products	311
Figure 85. Psychemedics' Record Of Innovation	313
Figure 86. Psychemedics Revenue	314
Figure 87. Psychemedics Regional Revenue	315
Figure 88. Quest Diagnostics Positioning	317
Figure 89. Quest Diagnostics Urine Testing Program Positioning	318
Figure 90. Rapid Detect Products	323
Figure 91. Rapid Detect Test Kits	323
Figure 92. Rapid Detect Urine Testing	324
Figure 93. Rapid Detect Saliva Testing	324
Figure 94. Rapid Detect Hair Testing	325
Figure 95. REI Pricing	325
Figure 96. Small Percentage Of Lab Test Costs Guides Most Healthcare Decisions 328	
Figure 97. TestCountry Associations and Services	330
Figure 98. AlcoTester.com Breathalyzers	331
Figure 99. AlcoTester.com Breathalyzers	332
Figure 100. Thermo Fisher Scientific Premier Brands	333
Figure 101. Thermo Fisher Scientific Drugs of Abuse Testing	334
Figure 102. Thermo Fisher Scientific Oral Fluid and Other Testing	336