Drug Testing Trends presented by R. H. Barry Sample, Ph.D., Director of Science and Technology, Quest Diagnostics

Today’s session
Drug Testing Trends presented by R. H. Barry Sample, Ph.D.
- About the Quest Diagnostics Drug Testing Index™ (DTI)
- Key findings
- Trends and insights from DTI data
- Analysis by drug category
- Summary
- Questions

Quest Diagnostics Drug Testing Index™
National analysis of workplace drug testing data from our forensic toxicology labs
Routine urine specimens submitted for workplace drugs of abuse testing
- Workplace
- Rehabilitation and criminal justice excluded
- Point of collection (POCT) confirmations excluded (excludes high positivity)

Laboratory positive data (prior to MRO review)
- Does not indicate whether there is an “alternative medical explanation”
- Includes employer/Medical Review Officer (MRO) blinds

Two major groups
- Federally-Mandated, Safety-Sensitive Workforce
- General U.S. Workforce

National Survey of Drug Use and Health (NSDUH)
National analysis of workplace drug testing data from our forensic toxicology labs
- Annual survey of the civilian, non-institutionalized population of the U.S. aged 12 years old or older
- Presents national estimates of rates of use, numbers of users, and other measures related to illicit drugs, alcohol and tobacco products
- Self-reported use
- Approximately 67,500 persons are interviewed in NSDUH annually

Common matrices in drugs of abuse testing
Detection windows vary by drug test type
- Urine drug testing: Detects recent use (previous 24-72 hours)
- Oral fluid drug testing: Detects recent use (previous 24-48 hours)
- Hair drug testing: Detects a pattern of repetitive use (up to 90 days, based on testing proximal 1.5” head hair)

Key findings
Key findings

Exclusive: Quest Diagnostics Drug Testing Index full year 2014 report

- Percentage of American workers testing positive for illicit drugs increased for the second consecutive year in the general U.S. workforce
- Marijuana positivity increased nationally for the second consecutive year
- Marijuana positivity increased at about the same rate in the two states with recreational marijuana-use laws as the rest of the U.S. in 2014
- Increases in workplace positivity for cocaine in the general U.S. workforce over the past two years, reversing a prolonged period of decline
- Amphetamines use, specifically the use of methamphetamine, showed an increase across both urine and oral fluid drug tests
- Positivity doubled for 6-AM, a specific marker for heroin, in the general U.S. workforce between 2011 and 2014

Trends and insights from DTI data

Annual positivity rate increases

Insights from millions of combined U.S. workforce urine drug tests

Workplace urine drug test positivity rates

Major testing groups

Illicit drug use increases

DTI data and NSDUH self-reported use in the previous 30 days

Analysis by drug category
Marijuana urine drug test positivity increases
Positivity increases for the second consecutive year

Marijuana use
DTI data and NSDUH self-reported use in the previous 30 days

Marijuana positivity
Increasing across all drug test types in the general U.S. workforce

Marijuana urine drug test positivity in general U.S. workforce
Comparing Colorado and Washington with national positivity rates

Cocaine urine drug test positivity increases
Reversing a prolonged period of decline

Cocaine use
DTI data and NSDUH self-reported use in the previous 30 days

June 3, 2015
Cocaine positivity
Increasing across all drug test types in the general U.S. workforce

Methamphetamine positivity
Highest level since 2007 in the general U.S. workforce

Amphetamine positivity
Increases in urine and oral fluid tests in the general U.S. workforce

6-AM (6-acetylmorphine) urine drug test positivity increases
Heroin doubled in the general U.S. workforce between 2011 and 2014
Summary

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- American workers are increasingly testing positive for illicit drug use across almost all workforce categories and drug test specimen types
- Marijuana increased for the second consecutive year in the general U.S. workforce
- Marijuana positivity increased at about the same rate in Colorado and Washington as the rest of the U.S. in 2014
- Marijuana positivity in oral fluid is twice that in urine and comparable to that in hair
- Steady increases in workplace positivity for cocaine in the general U.S. workforce over the past two years, reversing a prolonged period of decline
- Cocaine positivity is up across all specimen types in 2014
- Methamphetamine and heroin positivity rates continue upward trend
- Increases in prescription opiate positivity has stalled
- Oxycodone positivity is down dramatically from 2011 peak
- Hydromorphone positivity is flat and lower than 2011 peak
- Hydromorphone positivity continues to climb slowly
- Increases in Illicit drug positivity should cause employers and policymakers to take notice about the risks those drugs continue to represent for safety and compliance

Thank you

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