Workplace Drug Testing

I. Drug Testing Panels & Specimen Collection

II. Laboratory Analysis & MRO Basics

III. Day in the Life of a Medical Review Officer
Federal Drug Testing Authority

- Presidential Executive Order 12564 (10/1986) establishing the “Drug-Free Workplace Program”
- Dept. of Health & Human Services (HHS/SAMHSA) Mandatory Guidelines for Federal Workplace Drug Testing Programs
- Federal Agency Drug Testing Rules
- DEA Controlled Substances Act schedules I-V

Drug Testing Standards

- Federally-Regulated
  - HHS
  - DOT (“gold standard”)?
  - DOD
  - DOE
- Non-Federally Regulated
  - State Laws
  - Workers’ Compensation
  - Union Contracts

Types of Drug Testing

- (Pre-)Employment / Applicant / Preplacement
- Post-Accident / Post-Incident / Unsafe Practice
- Reasonable Suspicion / Cause
- Random
- Return to Duty
- Follow-up to Treatment
- Periodic / Voluntary
Drug Testing Panels

- Federal HHS panel: “NIDA 5” → “SAMHSA 5”
- Private sector expanded panels from 9-40+ drugs
- Cutoff levels have changed over the years
- Federal panel expanded for MDMA/MDEA/MDA
- Federal panel proposed expansion to synthetic opiates

Proposed Expanded Opiate Panel

- HHS has proposed adding synthetic opiates
  - Hydrocodone
  - Hydromorphone
  - Oxycodone
  - Oxymorphone

- Proposed May 2015; comments received; awaiting final rule

Drugs Not Currently Included in HHS Panel

- Cannabinomimetics, for example
  - Initially K2 and Spice (term covers a number of synthetic cannabinoids)
  - Include compounds such as JWH-018, JWH-073, JWH-098, CP-47,497 and HU-210
  - All fall into seven major structural groups and have effects similar to THC; several are more potent

- Methcathinone derivatives (“Bath Salts”)
  - Methylene dioxy pyrovalerone (MDPV)
  - Mephedrone
  - Methylone
  - Pyrovalerone

- Many new substituted phenylethylamines available on the street, e.g., NBOMe
“Alternative” Drug Testing Matrices

- Urine – HHS standard
- Oral Fluids – SAMHSA/HHS proposed May 2015; comments received; awaiting final rule
- Hair – SAMHSA Drug Testing Advisory Board has considered adding hair

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Alternative Specimens: Interpretation

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Detection Window</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Fluid</td>
<td>Hours or days – depends to some extent upon the drug.</td>
<td>- Relatively non-invasive collection</td>
<td>- Short detection window for some drugs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- An &quot;observed&quot; collection is more resistant to adulteration and substitution</td>
<td>- Requires sensitive immunoassays and MSMS technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- For some drugs correlate to free drug concentration in plasma</td>
<td>- Collection methods can dilute the specimen, making drug detection more difficult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- For &quot;HHS Drugs&quot; positive rates comparable to urine</td>
<td>- After cannabis use, THC is detected in the buccal cavity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- THCA present in very low concentrations due to transfer from plasma</td>
</tr>
</tbody>
</table>

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Positive Prevalence in Hair, Urine, Oral Fluids

<table>
<thead>
<tr>
<th>Drug(s)</th>
<th>Hair</th>
<th>Urine</th>
<th>Oral Fluids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamines</td>
<td>1.2%</td>
<td>0.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Cocaine/Metabolite</td>
<td>2.6%</td>
<td>0.24%</td>
<td>0.47%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>6.5%</td>
<td>1.9%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Opiates</td>
<td>8.21%</td>
<td>0.39%</td>
<td>8.85%</td>
</tr>
<tr>
<td>PCP</td>
<td>0.06%</td>
<td>0.02%</td>
<td>0.02%</td>
</tr>
</tbody>
</table>

Quest laboratories side-by-side comparison, MRO Update, June 2015
Drug Testing - 3 Steps

1. Specimen Collection
2. Specimen Testing and Confirmation
3. Medical Review of Results (MRO)

- Test For
  - Illicit Drugs (Urine)
  - Alcohol (Breath, Saliva)
  - Other Specimens (Oral fluids, Hair)

Collection of Specimens

DOT 21-Step Urine Collection Protocol*

- Preparation of Collection Space
  - Secure area; Water turned off; Coloring agent
- Preparation of Donor
  - Photo ID, Removal of outer clothing, Emptying pockets; Washing hands; Collection container
- Monitoring Collection
- Collector checks Temperature, Volume, Appearance
- Pour into primary & secondary bottles; seal; sign
- Complete and sign Custody and Control forms

** SAMHSA and DOT Specimen Collection Manuals available online
Specimen Collection Challenges
DOT Collection under Direct Observation

1. All return-to-duty and follow-up tests for previously positive donor
2. Specimen temperature out of range (90-100°F)
3. Tampering attempt identified
4. Previous test “Canceled” as “Invalid Result” with no medical explanation for invalidity
5. Previous test “Canceled” because no Split Specimen available
6. Previous test was “Negative Dilute” with creatinine 2-5 mg/dL

“Shy Bladder” Collection Protocol

- SB = unable to provide 45 ml of urine
- Provide up to 40 ounces of fluids at collection site & allow up to 3 hours
- Discontinue after 3 hours; check “none provided” and report as “Shy Bladder”
- If medical exam provides reasonable explanation, collection is reported as “Cancelled”

Workplace Drug Testing

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II. Laboratory Analysis & MRO Basics

III. A Day in the Life of a Medical Review Officer
**Laboratory Drug Testing Flow Chart**

- Specimen Collection
- MRO Report
- Receiving Non-Negatives → Storage
- Screening Review → Negatives
- Review Negatives → Presumptive Confirmation
- Non-Negatives → ALL TRANSFERS UNDER CHAIN OF CUSTODY

**Initial Screening vs. Confirmation Tests**

- Initial screening immunoassay analyzes different metabolites than GC/MS confirmation
  - e.g., marijuana, cocaine metabolites
- For this reason, initial screening cutoff levels are higher than for confirmation
  - e.g., marijuana, cocaine, amphetamines
- This is sometimes mis-interpreted as laboratories giving “false positive” immunoassays
  - e.g., bupropion positive for amphetamine
  - e.g., efavirenz positive for marijuana

**HHS Mandated Screening Cut-Offs (ng/ml)**

- Marijuana Metabolites: 50
- Cocaine Metabolites: 150
- Opiate Metabolites:
  - Codeine/Morphine: 2000
  - 6-Acetylmorphine: 10
- PCP: 25
- Amphetamines:
  - Amp/Mamp: 500
  - MDMA: 500

1. Morphine target analyte
2. Can use either a single kit or multiple kits provided target analyte can be detected at the cut-off
3. Methamphetamine is the target analyte for amphetamine/methamphetamine testing
HHS/DOT Mandatory Confirmation Cut-Offs (ng/mL)

- Marijuana * 15
- Cocaine * 100
- Opiates
  - Morphine 2000
  - Codeine 2000
  - 6-AM 10
- PCP 25
- Amphetamines
  - Amphetamine 250
  - Methamphetamine 250
  - MDMA, MDA, MDEA 250

*As a metabolite

Other Laboratory Considerations

- Some metabolites tested for may be long-lived, but non-psychoactive, e.g., THCCOOH and benzylecgonine
- 6-AM testing mandated for HHS/DOT testing, but may not be routinely performed on non-federally regulated testing

Specimen Validity Testing
Types of Adulterants

- Traditional:
  - Household chemicals
  - Soap
  - Salt

- Designer adulterants
  - Urinalid (glutaraldehyde)
  - Oxidizing agents (nitrite, peroxide, chromate, halogen containing)

- Interferences with immunoassays or confirmation assays
- “Ones unknown”

Specimen Validity Testing (SVT)

A SAMHSA certified lab. shall:
- Determine the creatinine conc. on every specimen
- Determine the specific gravity on every specimen for which the creatinine conc. is less than 20 mg/dL
- Determine the pH on every specimen
- Perform one or more tests for oxidizing adulterants on every specimen
- Perform additional validity tests when the following conditions are observed:
  - Abnormal physical characteristics
  - Reactions or responses characteristic of an adulterant
  - Possible unidentified interference or adulterant
Laboratory Reporting of Primary Specimens

- Negative
- Negative – dilute (Creatinine and SG Values)
- Rejected for testing, with remarks
- Positive with drug(s)/metabolite(s) noted
- Positive with drug(s)/metabolite(s) noted - dilute
- Adulterated with remark(s)
- Substituted with remark(s)
- Invalid with remark(s)

Split Specimens

- Required for all DOT and DHHS tests
- Split specimens must be retained by laboratory for 1 year on all non-negative results
- Re-confirmation for drugs is based on Limit of Detection, not confirmation cut-off levels
- Re-confirmation for adulterants or substitution must meet the criteria required for original confirmation
- For non-DOT single specimen, a separate aliquot may be sent to second lab for testing.

Laboratory Drug Testing Flow Chart

- Specimen Collection
- Receiving
- Screening
- Review
- Negatives
- Presumptive
- Non-Negatives
- MRO Report
- Positives
- Storage
- Review
- Negatives
- Confirmation
- All transfers under chain of custody
Laboratory Reporting of Split Specimens

- Reconfirmed
- Failed to reconfirm with reason
  - Specimen not available for testing
  - Drug/drug metabolites not detected
  - Adulterant not found within criteria
  - Specimen not consistent with substitution criteria

Step 3 – Medical Review

MRO Basics

DOT Medical Review Officer Requirements

- Licensed physician (MD or DO) in USA, Mexico or Canada
- Only one license required
- Basic knowledge in:
  - Controlled substances abuse disorders (knowledge of and clinical experience in)
  - Alternative medical explanations
  - Adulteration/substitution
  - Invalid results
  - DOT regulations (MRO and agency regulations)
<table>
<thead>
<tr>
<th>DOT MRO Qualification</th>
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</thead>
<tbody>
<tr>
<td><strong>QUALIFICATION TRAINING</strong></td>
</tr>
<tr>
<td>◼ Collection procedures (urine)</td>
</tr>
<tr>
<td>◼ COC, Reporting &amp; Record keeping</td>
</tr>
<tr>
<td>◼ Interpreting drug &amp; validity test results</td>
</tr>
<tr>
<td>◼ Role &amp; responsibility of MRO in DOT program</td>
</tr>
<tr>
<td>◼ Interaction with other participants (SAP, DERs)</td>
</tr>
<tr>
<td>◼ Agency rules as needed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOT MRO Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass a nationally-recognized certification examination</td>
</tr>
<tr>
<td>Requalification training during each 5-year period after certification</td>
</tr>
<tr>
<td>Reexamination every 5 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Two Relevant Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>◼ American College of Occupational &amp; Environmental Medicine (ACOEM)</td>
</tr>
<tr>
<td>– Direct “Drug &amp; Alcohol Testing and Medical Review Officer” course – 12-15 hours CME</td>
</tr>
<tr>
<td>◼ Medical Review Officer Certification Council (MROCC)</td>
</tr>
<tr>
<td>– Offers MRO certifying examination</td>
</tr>
<tr>
<td>◼ Both meet DOT MRO training/certification requirements</td>
</tr>
</tbody>
</table>
MRO Function

- MRO role is as “gatekeeper”
- Information comes from lab, collection site, employer, etc.
- After review and interpretation of all available information, the MRO makes a “verification”
  – e.g., laboratory confirmed positive becomes a verified negative, positive, cancelled or refusal to test

MRO Responsibilities (9 Rs; 2 Is)

A quick preview; each will be covered in detail later.
1. Receive Results
2. Review Results
3. Investigate / Inquire / Interview
4. Record Pertinent Findings
5. Reveal (in Donor Explanations)

MRO Responsibilities (continued)

6. Reanalyze vs. Retest / Recollect
7. Refer for Medical Evaluation
8. Interpret / ”Verify” Findings
9. Report to Employer
10. Release Medical Information
11. Recordkeep
1. **Receive Results**

- Receive confirmed results from lab
- **Not** by telephone
- Results electronically or by secured fax
- Custody and Control Form (CCF) by fax/mail from
  - Collection Site
  - Laboratory (may omit mailing CCF for negatives)

2. **Review Results**

- Make sure they represent a valid test
- Examine Custody and Control Form (CCF)
- “Administrative Review” of negatives
- MRO personal review of “non-negatives (positives, adulterated, substituted, and invalid specimens)
- Lab may identify a flaw
- MRO must decide its significance
Fatal Flaws vs. Correctible Errors

**FATAL FLAWS**
- Both collector signature and collector printed name are missing
- Specimen ID number on CCF & bottle do not match
- Bottle seal is broken, absent, or shows evidence of tampering
- Neither primary nor split specimen has at least 30 ml of urine

**CORRECTIBLE ERRORS**
- Collector signature omitted
- No donor signature or remark explaining failure to sign
- Certifying scientist signature missing for non-negative
- Non-DOT or outdated form used for DOT test
- Temperature box not checked

3. **Investigate / Inquire / Interview**
- Everyone with a positive, adulterated, or substituted test must be given opportunity to speak personally with an MRO before test is verified
- **Method**
  - Face to face
  - Telephone (quick, practical)

MRO Review of non-Negative Results
- Non-negative result
  - Positive, Adulterated, Substituted, & Invalid
  - Must have CCF copy 1 with lab scientist's signature
- Review CCF Copy 2 (or equivalent) – copy with donor’s signature
- If employer has “stand-down” waiver, notify DER of laboratory result prior to contacting donor
- Contact and interview donor
MRO Verification without Donor Interview

- Donor expressly refuses to talk to MRO
- Donor failed to contact MRO within 72 hours after notification by the DER ("3-Day Rule")
- No MRO or DER contact with donor after 10 days ("10-Day Rule")
- MRO may “re-open” verification process if donor presents “exceptional circumstances” within 60 days
- All donor contact attempts must be documented

The Medical Review Interview

- Identify self and affiliation
- Confirm identity of donor
- Inquire about collection procedures (optional)
- “Medical Miranda” warning
- Inform donor of result (must specify drugs or adulterant)
- Explain verification process

“Medical Miranda -1”

“The reason I am speaking to you personally is discuss the results of your drug test. There are a few things important for you to know: 1) If any further medical evaluation is needed you must comply with such a request and that failure to do so is the same as refusing to discuss the test result; 2) I am required to report to third parties without your consent drug test results or medical information affecting performance of safety-sensitive duties…

You have the option of not discussing the matter with me if you choose. Do you have any questions at this point?”

(Ref: 49 CFR 40.135)
“Medical Miranda -2”

“The results of your drug test have been received and it is a ______ (positive, adulterated, substituted, invalid) test.

The purpose of this interview is to provide you an opportunity to voluntarily share information with me that might explain this result, such as anything from your medical history, prescriptions, recent treatment or something in your diet. Based upon this information, I can make the best final determination of the result.”

The Medical Review Interview

• Identify self and affiliation
• Confirm identity of the donor
• Inquire about collection procedures?
• “Medical Miranda”
• Inform donor of result
• Explain verification process
• Inquire re: illicit drug use
• Inquire re: Rx/OTC drug use and diet
• Offer Split Sample
• Answer technical questions
4. **Record Pertinent Findings**

- Document MRO reviews
  - What occurred; how decision was made
- Use MRO Punchlist / Checklist / Contact Record
  - Documents valid, consistent, standard operating procedure
  - Log each attempt at contact
  - Document timing for 3 day, 10 day clocks
- Validate meds. with physician/pharmacist

5. **Revel (in Donor Explanations)**

- Transmitted sexually or through skin
- Deer/chickens grazed on marijuana/hemp
- Foreign travel (Mexico, Canada)
- Unknowing ingestion (spiked brownies)
- Hemp oil cholesterol lowering diet
- OTC meds: (Advil, Vicks, golden seal tea)
- Passive inhalation (rock concert, e.g., DMB)

6. **Reanalyze vs. Retest / Recollect**

- Single vs. Split specimens
- Reanalysis vs. Retesting
- Only MRO can ask lab to reanalyze
- MRO can request further analysis of specimen at another lab (e.g., invalid specimen)
- Split specimen (“bottle B”) analyzed only at Donor’s request (within 72 hours) at another laboratory
MRO Responsibilities for Split Specimen Adulterated/Substituted

- MRO offers opportunity for split specimen analysis just as with a confirmed positive test
- Positive split analyzed for presence of drug above limit of detection
- Laboratory must analyze split using original substitution or adulterant criteria

7. Refer for Medical Evaluation

- Evaluation of Shy Bladder or Shy Lung
- Examination for clinical signs of opiate abuse
- Condition that might explain a Substituted or Adulterated specimen
- MRO can perform these evaluations, but must function in a different role (clinician)

8. Interpret / "Verify” Findings

- MRO must verify laboratory-confirmed results as
  - Negative (with remarks if dilute)
  - Positive
  - Canceled (with remarks re reason)
  - Refusal to Test (with remarks, e.g., adulterated, substituted)
- MRO must simplify the complex, translating laboratory test and interview data into simple reportable terms
Positive Test Verification

- For all positives except opiates <15,000ng/mL, the donor must present acceptable documentation of an “alternative medical explanation” for the drug(s)
- MRO may allow up to 5 days to provide medical use documentation

Many Meds Cause Positive Drug Tests

- Table from Robert Swotinsky’s 
- Exhibit 11-3: Medications Sold in United States that Can Cause Confirmed Positive Drug-test Results

Test Verification Issues

- If drug was obtained legally in a foreign country, the MRO must determine if there was a legitimate medical reason for the use of the drug and if it was used consistently with its intended medical purpose (Schedule 1 drug excepted)
- Internet drug prescriptions – difficult for donors to obtain medical documentation
- If there is a legitimate medical explanation, the test is reported as Negative
MRO Reversals of Lab Positives

<table>
<thead>
<tr>
<th>Lab Positive for</th>
<th>MRO Verified Positive</th>
<th>MRO Verified Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocodone</td>
<td>14.4%</td>
<td>85.6%</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>16.7%</td>
<td>83.3%</td>
</tr>
<tr>
<td>Barbiturates</td>
<td>19.2%</td>
<td>80.8%</td>
</tr>
<tr>
<td>* Codeine, Morphone, 6-AM</td>
<td>23.3%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Oxycodeine</td>
<td>26.6%</td>
<td>73.4%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>27.5%</td>
<td>72.5%</td>
</tr>
<tr>
<td>* Amphetamines</td>
<td>31.1%</td>
<td>68.9%</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>32.4%</td>
<td>67.6%</td>
</tr>
<tr>
<td>* Marijuana</td>
<td>99.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>* Cocaine</td>
<td>99.9%</td>
<td>0.1%</td>
</tr>
<tr>
<td>* PCP</td>
<td>100%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

* = Federally-Regulated

MRO Update 11/2010

Reviewing Positive Test Results

- **Phencyclidine, MDMA/MDEA/MDA**
  - No medical explanation

- **Cocaine**
  - ENT, ophthalmology, surgery

- **Marijuana**
  - The only federally-acceptable medical explanation for THC positive is an authorized prescription for Marinol™
  - Non-federal: depends on company policy and state laws
  - MJ use increases risk of motor vehicle crashes;
    commercial drivers cannot use medical marijuana
Is Medical Marijuana an Acceptable Medical Explanation?

- **Federally Regulated**
  - DHHS/DOT: Schedule 1 substance not acceptable
- **Non-Federally Regulated**
  - MROCC/AAMRO: Determined by employer policy
  - ACOEM/AAOHN: MRO should report as positive, with explanation; employer to make determination
  - MRO Section: “may determine whether medical facts corroborate valid medical marijuana use” (problematic in brief telephone interview)

### Reviewing Positive Test Results

- Phencyclidine, MDMA/MDEA/MDA
- Cocaine
- Marijuana
- Amphetamines
  - Amphetamine
  - Methamphetamine
- Opiates
  - Morphine
  - Codeine
  - 6 AM

### Methamphetamine Interpretation

- \(d\) and \(l\) isomers of methamphetamine are the key
- \(d\) and \(l\) amphetamine not at issue
- 100 ng/mL or more of amphetamine must be present for a laboratory to report a methamphetamine positive result
- < 250 ng/mL amphetamine won’t be reported
- Know your laboratory - isomers by request?
**Methamphetamine Interpretation**

- Donor Interview Should Include:
  - Question use of medication that contains d-methamphetamine
  - Ask about recent use of nasal inhaler (e.g., Vicks inhaler™)
  - Question use of Rx drugs (e.g., selegilene)
  - Obtain d and l isomer characterization when history suggests use of Vicks or use of Rx meds that metabolize to l-methamphetamine

**d- and l- Methamphetamine Interpretation**

- For Vick’s Inhaler™, d and l isomer characterization reveals:
  - Large percentage of l-methamphetamine and little or no d-methamphetamine
  - l-methamphetamine must be at least 80%
  - Selegilene gives more equal amounts of l-amphetamine and l-methamphetamine - 80% rule also applies.

**Opiate Positive Verification**

- Positive 6 Acetyl Morphine analysis
  - no acceptable medical explanation for 6AM (heroin)
- Morphine/Codeine ≥ 15,000 ng/mL, donor must provide documented medical explanation
- Morphine/Codeine (2,000-<15,000 ng/mL) requires independent clinical evidence of unauthorized opiate use
  - Clinical evidence* obtained from medical examination/interview
  - Rule is silent on “spousal use” issue
  - Admission of illicit use of other drugs is not clinical evidence of illicit morphine/codeine use

* Recent needle tracks, behavior & psychological signs of acute intoxication or withdrawal, admission of unauthorized recent use
Opiate Result Reporting

- **Positive**
  - Unable to contact donor (72 hour and 10 day rule)
  - Donor refuses to talk with MRO
  - 6 AM (heroin) and morphine present
  - >15,000 ng and no medical use documentation
  - Independent clinical evidence of unauthorized opiate use
    (admission of use on history or findings on clinical examination)

- **Negative**
  - >15,000 ng & acceptable medical use
  - >2,000-<15,000 ng/mL & no independent clinical evidence of
    illicit opiate use

Opiate Concerns

- Opioids promoted for chronic non-cancer pain
- Since 1999 sales of Rx opioids rose 300%; opioids now most frequently Rx drug
- Rx opioid overdose admissions and deaths at epidemic levels (CDC)
- 2012 Senate investigated close $$ connection between Rx opioid makers and medical societies
  (e.g., American Pain Foundation)

Washington State Interagency Opioid Guidelines*

- **2007**
  - High risk of overdose in chronic users
  - “Yellow Flag” = 120 mg daily morphine-equivalent dose (MED); should refer to pain specialist

- **2015**
  - “No completely safe dose”
  - Risk 2X at 20-49 MED, 9X at 100 MED or more
  - Not recommended for LBP, fibromyalgia, etc.

* WA State Agency Medical Directors Group
ACOEM Opioid Guideline – 2014

Not Recommended - Acute or chronic opioid use for patients who perform safety-sensitive jobs.
- “These jobs include operating motor vehicles, other modes of transportation, forklift driving, overhead crane operation, heavy equipment operation, sharps work (e.g., knives, box cutters, needles)… and tasks involving high levels of cognitive function and judgment.” p. 11

Evidence Level = C: moderate confidence
- crash risk increased >2x
- dose-response relationship – maximum for opioid-naïve acute pain is 50 mg Morphine Equivalent Dose (MED)

Canceled Tests

- Only MRO can cancel a drug test
- MRO must cancel tests that:
  - Are rejected by laboratory for a fatal flaw
  - Are reported as “Invalid”
  - Fail to reconfirm on split analysis
  - Are “shy bladder” with medical explanation
  - Have a correctable flaw, but no statement of correction could be obtained

9. Report Results

- To Employer within 24 hr of completing verification of non-negatives
  - Immediate telephone call recommended
  - Follow with written report (electronic OK)
  - If positive, give drug name, but not quantitative result
  - If adulterated or substituted, report details
- To Donor or authorized designee
- To court of law, if requested
- To DHHS/DOT (e.g., if split failed to reconfirm or if substituted result is canceled)
10. Release Medical Information

- MRO must release medical information learned as part of verification process to third parties without donor’s consent if:
  - Information likely to result in employee being medically unqualified under an applicable DOT regulation
  - DOT “if continued performance in safety-sensitive function likely poses significant safety risk”
- Report to employer, health care provider determining medical qualifications, or DOT agency

11. Recordkeep

- Negatives - 1 year
- Positives and Non-Negatives - 5 years
- Drug test results should be separated from patient medical chart because of confidentiality concerns

Non-Regulated Testing: Differences

- Drugs Tested (single void) & cutoff Levels
- Witnessed Collection
- No Split Specimen
- CCF: Info re Recent Rx Medication
- On-Site Testing; Positives Kept Off Duty
- Matrices: oral fluid, hair, blood alcohol
- Use of MRO
<table>
<thead>
<tr>
<th>Current Drug Testing Issues - 1</th>
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</thead>
<tbody>
<tr>
<td>Deterrence vs. Fitness-for-Duty Programs</td>
</tr>
<tr>
<td>Employers don’t understand the meaning of a Positive drug test</td>
</tr>
<tr>
<td>Specimen Validity Testing now required for federal testing → huge rise of Invalid specimens</td>
</tr>
<tr>
<td>On-site Point-of-Collection “Instant Test Kits”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Drug Testing Issues - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx drug misuse increasing (→ broader panels, analysis of drug levels)</td>
</tr>
<tr>
<td>Medical marijuana (23 states) and legalized recreational use</td>
</tr>
<tr>
<td>Cannabino-mimetics (MJ Substitutes: K2, spice, bath salts. As soon as listed Schedule I, supplier change chemicals) - workplace issues??</td>
</tr>
<tr>
<td>Non-Federally Regulated Drug Testing – 30 million tests annually</td>
</tr>
</tbody>
</table>