

NRC Staff Presentation to the International Brotherhood of Electrical Workers

Fitness-for-Duty (FFD) Requirements and Performance in the Commercial Nuclear Industry

“A Direct Contribution to Safety and Security”
November 19, 2015

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10 CFR Part 26, “Fitness for Duty Programs”

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Discussion Topics

- Six Key Messages
- What I would like to learn
- The NRC mission
- Being Fit for Duty
- Defense-in-Depth Regulatory Requirements
 - Access Authorization and Fitness for Duty
- Commercial Nuclear Industry Performance
 - Drug and Alcohol Testing Results
 - Marijuana, multi-substance positives, and subversions
- Rulemaking
- Questions?



Six Key Messages

1. Drug and alcohol testing and other fitness-for-duty (FFD) requirements are a direct contribution to safety and security because they help ensure that individuals are fit for duty
2. Being fit for duty is one of many safety- and security-significant programmatic elements of the Commission's defense-in-depth strategy
3. The use of impairing substances by the contractor/vendor workforce continues to challenge the effectiveness of the Part 26 rule
4. The drug, alcohol, and behavioral observation provisions apply both onsite and offsite
5. We cannot continue to test our way to maintain "adequate assurance" – we need your help
6. Medical Review Officer determinations and the Substance Abuse Expert developed treatment plan for an individual, made pursuant to the conduct of duties and responsibilities required under Part 26, provides a minimum level of assurance that persons are fit for duty

What I would like to learn

Does any local or district:

Testing

- Conduct its own drug or alcohol testing program?
- Track the drug and alcohol test results from employer programs?

Employee Services

- Initiate counseling or health services for members who need help dealing with drugs/alcohol?
- Track the use of employer-sponsored Employee Assistance Programs?

Briefings

- Conduct a 10 CFR Part 26 briefing prior to sending an individual to an NRC-licensed facility?
- Conduct a briefing after the occurrence of a 10 CFR Part 26 positive test result?

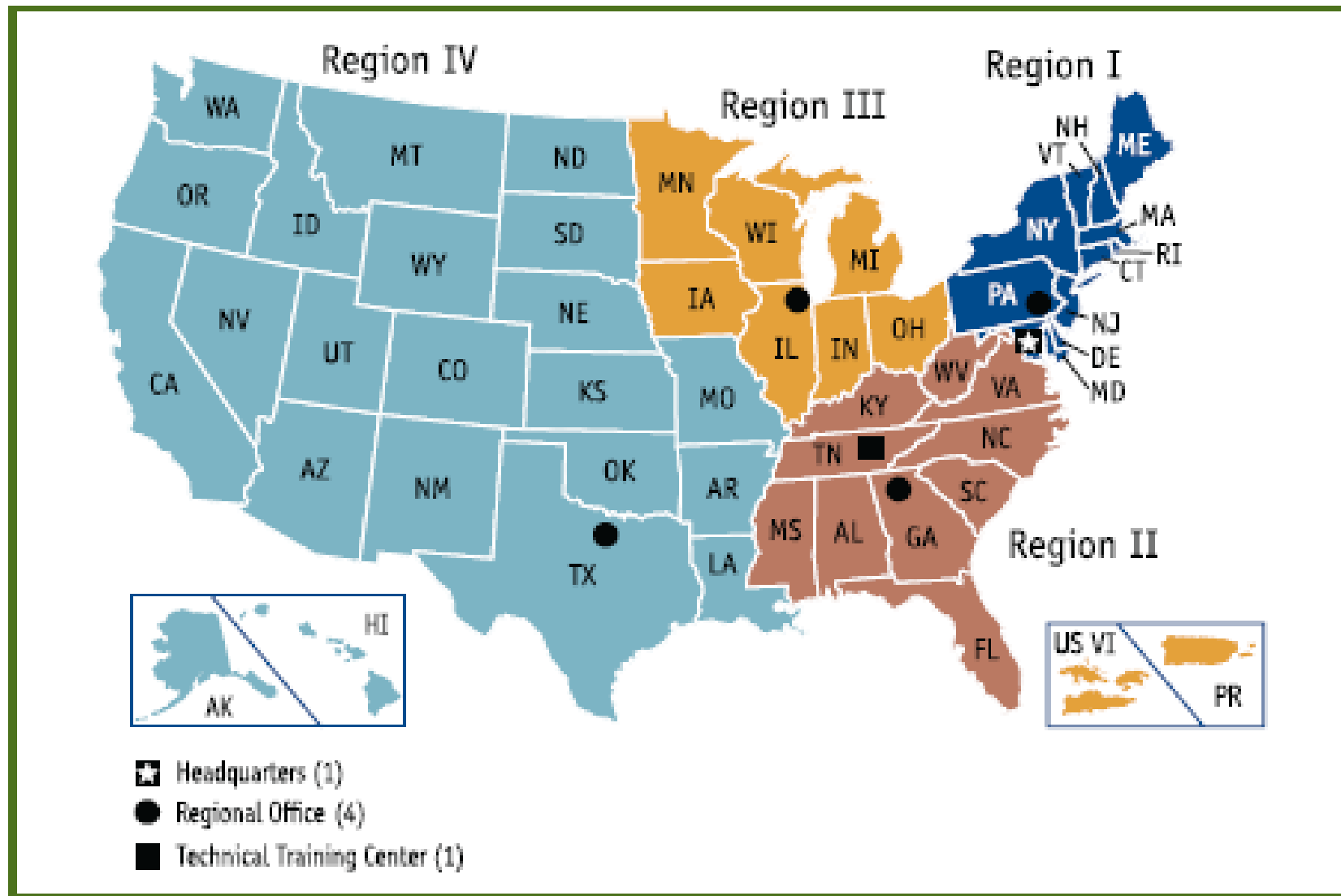
Mission

The mission of the NRC is to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure the adequate protection of public health and safety, promote the common defense and security, and protect the environment.

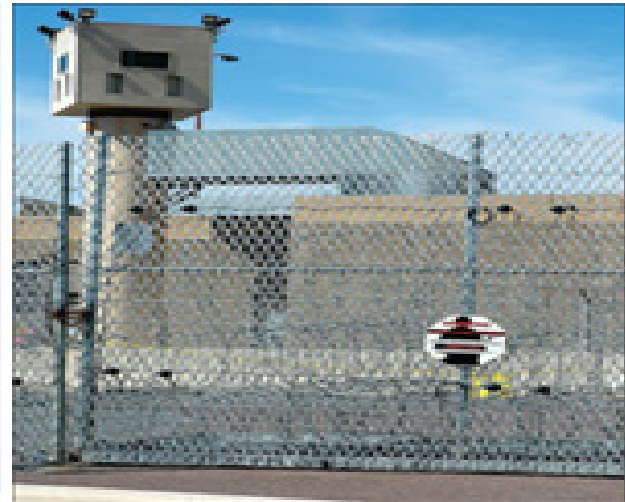
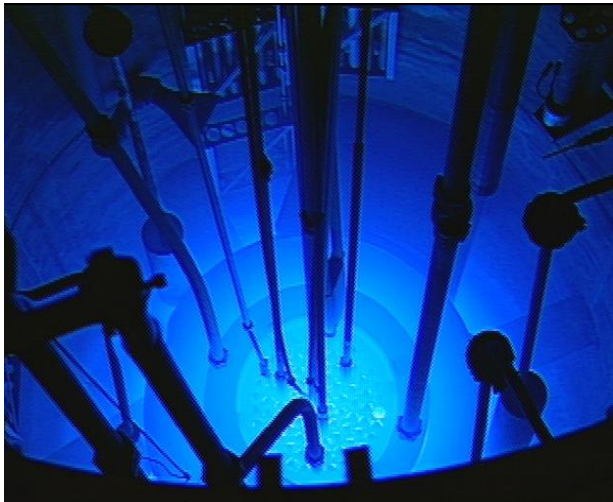
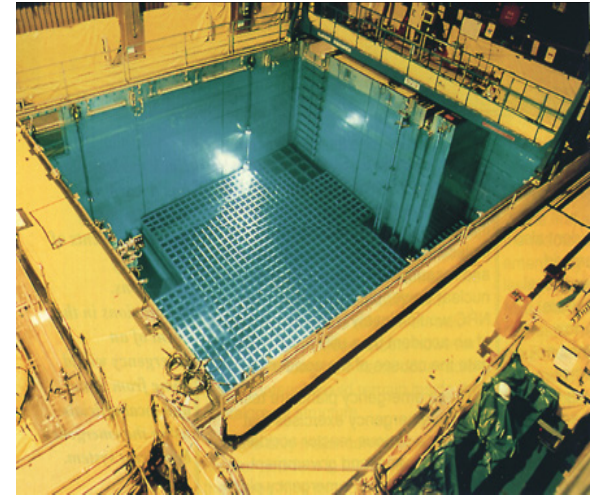
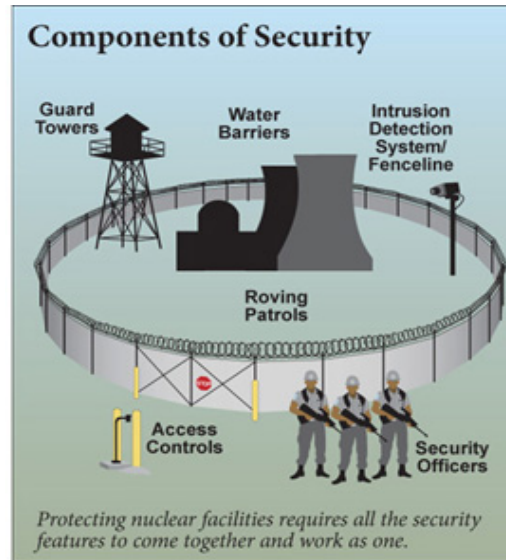
We do this by:

1. Establishing standards, regulations, and requirements
2. Licensing facilities and possession, use, and disposal of nuclear materials
3. Inspecting facilities and of users to ensure compliance
4. Providing emergency response and assessment
5. Assessing security threat conditions
6. Providing liaison with Federal, State, and Local partners

NRC Regional Offices



Power Plant Features



History of the FFD Program

- | | |
|------------------|--|
| August 20, 1954 | Atomic Energy Act – Atomic Energy Commission |
| October 11, 1974 | Energy Reorganization Act – Nuclear Regulatory Commission
Department of Energy |
| June 7, 1989 | The FFD rule was published |
| March 31, 2008 | The FFD rule was significantly changed <ul style="list-style-type: none">➤ Better alignment with the U.S. Department of Health and Human Services' Mandatory Guidelines for Federal Workplace Drug Testing➤ Strengthened the drug and alcohol requirements➤ Enhanced regulatory consistency regarding “authorization”➤ Established fatigue management➤ Enhanced worker protections |



Being fit for duty is part of the NRC's defense-in-depth regulatory framework that helps provide assurance that persons who have unescorted access to the protected areas at commercial nuclear power reactors and Category I fuel cycle facilities or sensitive information, or who conduct certain activities, can safely and competently perform assigned duties so as to not cause conditions adverse to safety or security.

From the requirements in 10 CFR Part 26, being fit for duty means that a person is:

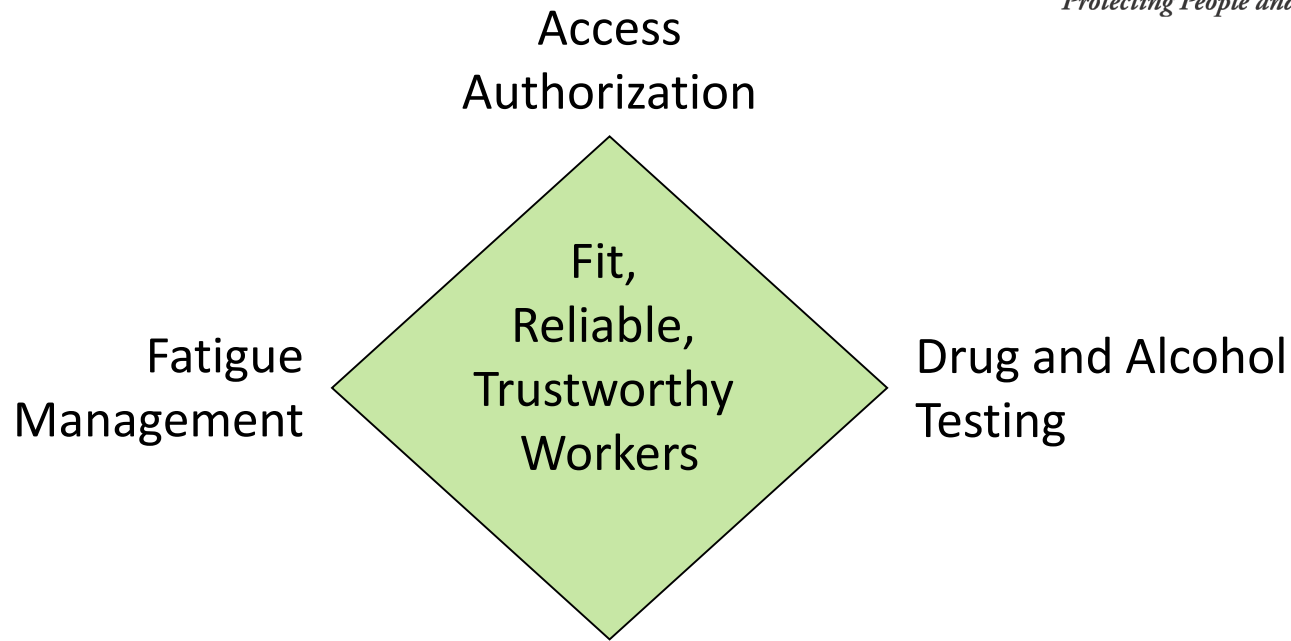
- a) not impaired or potentially impaired by any legal or illegal drug or substance;
- b) mentally & physically capable of safely & competently performing assigned duties;
- c) not impaired by acute or cumulative fatigue; and,
- d) trustworthy and reliable by the avoidance of substance abuse, use of illegal substances, and compliance with the 10 CFR Part 26 program.

A person who is fit for duty must be trained in accordance 10 CFR 26.29.

Defense-in-Depth

Defense-in-Depth is an approach to designing and operating nuclear facilities that prevents and mitigates accidents that release radiation or hazardous materials. The key is creating multiple and redundant layers of defense for potential human and mechanical failures so that no single layer, no matter how robust, is exclusively relied upon. Defense-in-Depth includes the use of access controls, physical barriers, redundant and diverse key safety functions, and emergency response measures.

The Defense-in-Depth FFD Strategy

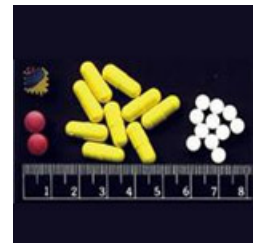


Behavioral
Observation



Access Authorization – 10 CFR 73.56

1. Background Investigation
 - a) Informed Consent
 - b) Personal History Disclosure
 - c) True Identity
 - d) Employment History
 - e) Credit History
 - f) Psychological Assessment
2. Behavioral Observation
3. Self-reporting of Legal Actions



Fitness for Duty – 10 CFR Part 26

1. Performance objectives
2. Policy, programs, procedures, and training
3. Drug and alcohol testing and consent to test
4. Behavioral observation
5. Employee assistance programs
6. Protection of information (i.e., privacy protection)
7. Employee appeal/review process for violations
8. Audits and corrective actions
9. Reports and reportability
10. Determinations of fitness



IBEW Code of Excellence*

1. Exercise safe and productive work practices
2. Promote an alcohol and drug free workplace
3. Demonstrate zero tolerance for drug and alcohol abuse
4. Perform the highest quality and quantity of work
5. Utilizes skills and abilities to their maximum
6. Arrive to work ... ready to work
7. Work in a safe and healthy manner
8. Follow employer and customer work rules



“Follow safe, reasonable, and legitimate management directives”

* Aggregated and summarized from IBEW national HQ and Districts 5 and 7.

Contractor/Vendor

A contractor/vendor is any company or individual not employed by the a licensee or other entity specified in 10 CFR 26.3(a)-(c), who is providing work or services to a licensee or other entity covered in 10 CFR 26.3(a)-(c), either by contract, purchase order, oral agreement, or other arrangement. (10 CFR 26.5)

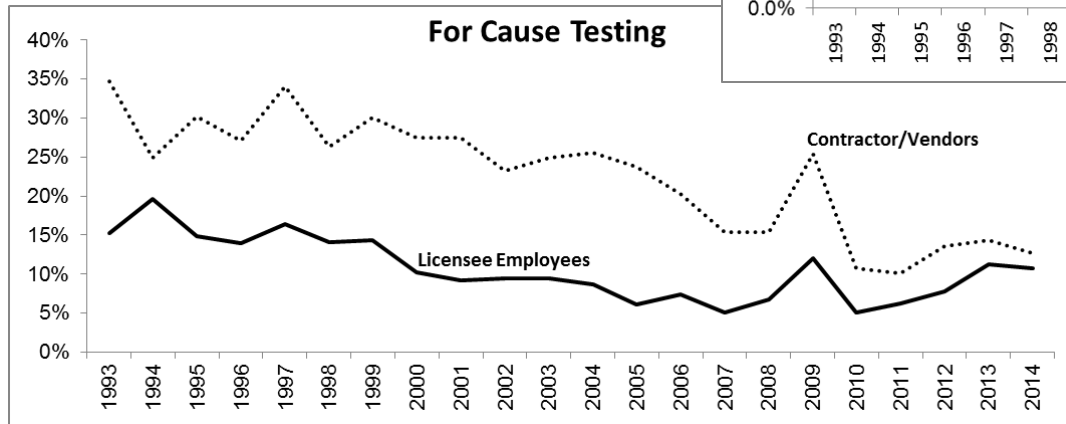
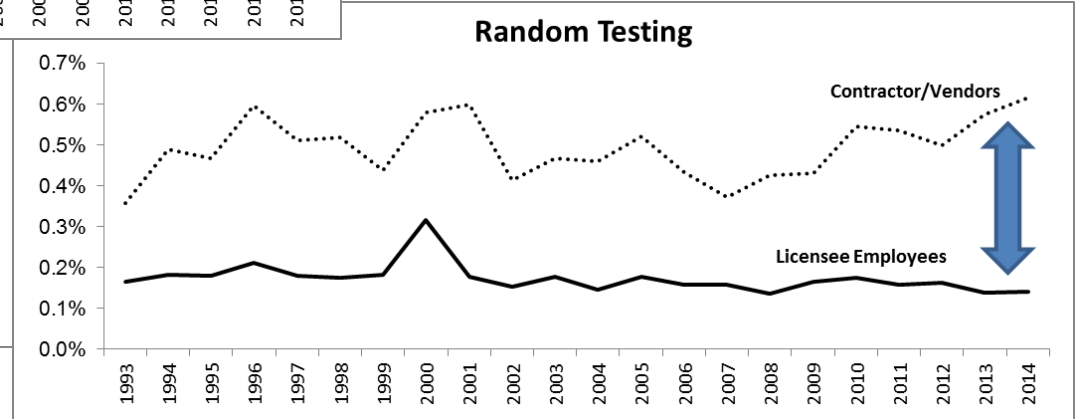
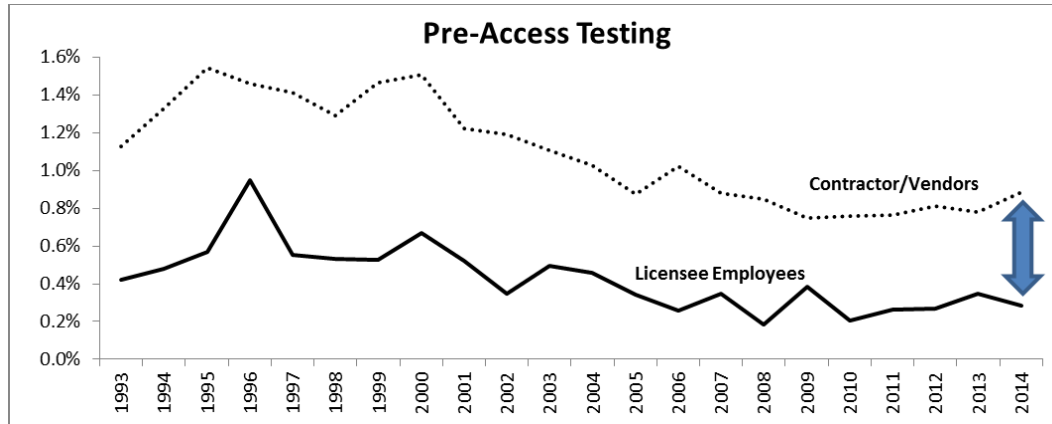
The contractor/vendor data in this presentation is aggregated data from the drug and alcohol testing of union and non-union individuals.

Licensee Employee

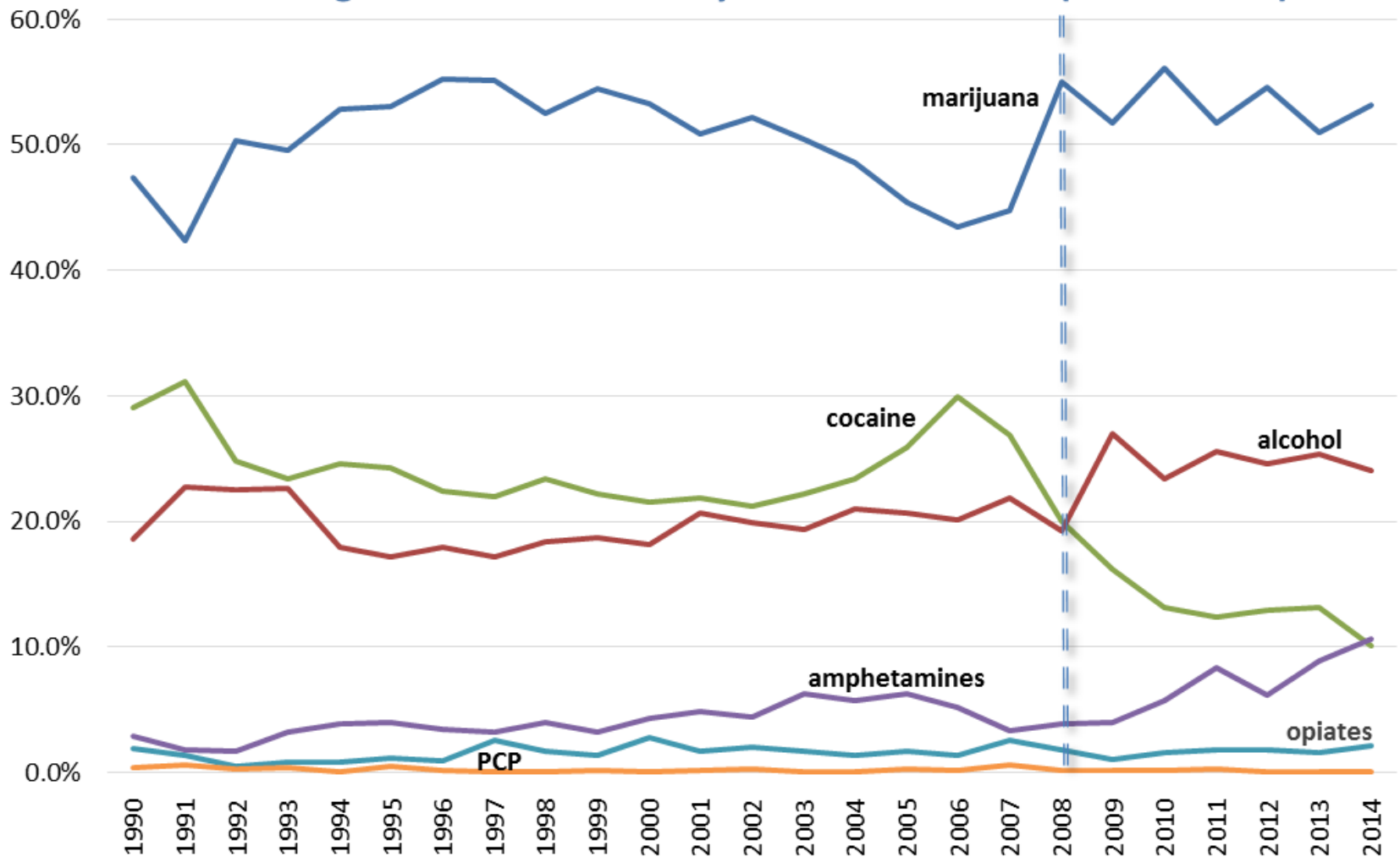
A licensee employee is an individual employed by the a licensee or other entity specified in 10 CFR 26.3(a)-(c), who is providing work or services to a licensee or other entity covered in 10 CFR 26.3(a)-(c).

- 75** **Licenses and other entities with an FFD program**
- 166,590** **Individuals drug & alcohol tested** *(up 3% from 2013)*
- 1,133** **Individuals that tested positive for a drug, alcohol, or refused a test**
67% identified at pre-access
19% identified during random testing
- 0.68%** **Industry positive rate, all tests** *(up from 0.62% in 2013)*
0.23% licensee employee positive rate *(down from 0.25% in 2013)*
0.88% contractor/vendor positive rate *(up from 0.81% in 2013)*
- 0.34%** **Industry random testing positive rate** *(up from 0.31% in 2013)*
0.14% licensee employee positive rate *(same as in 2013)*
0.62% contractor/vendor positive Rate *(up from 0.57% in 2013)*

Positive Rates by Employment and Test Type



NRC Drug and Alcohol Testing Panel (10 CFR Part 26) Percentage of Total Positives by Substance Tested (1990 - 2014)



Positive Rates by Employment and Test Type, 2014

Test Category	Licensee Employees			Contractor/Vendors			Total		
	Number Tested	Number Positive	Percent Positive	Number Tested	Number Positive	Percent Positive	Number Tested	Number Tested Positive	Percent Positive
Pre-Access	9,545	27	0.28%	82,823	736	0.89%	92,368	763	0.83%
Random	37,545	53	0.14%	27,144	167	0.62%	64,689	220	0.34%
For Cause	215	23	10.70%	479	61	12.73%	694	84	12.10%
Post-Event	241	1	0.41%	656	12	1.83%	897	13	1.45%
Followup	3,382	14	0.41%	4,560	39	0.86%	7,942	53	0.67%
Total	50,928	118	0.23%	115,662	1,015	0.88%	166,590	1,133	0.68%

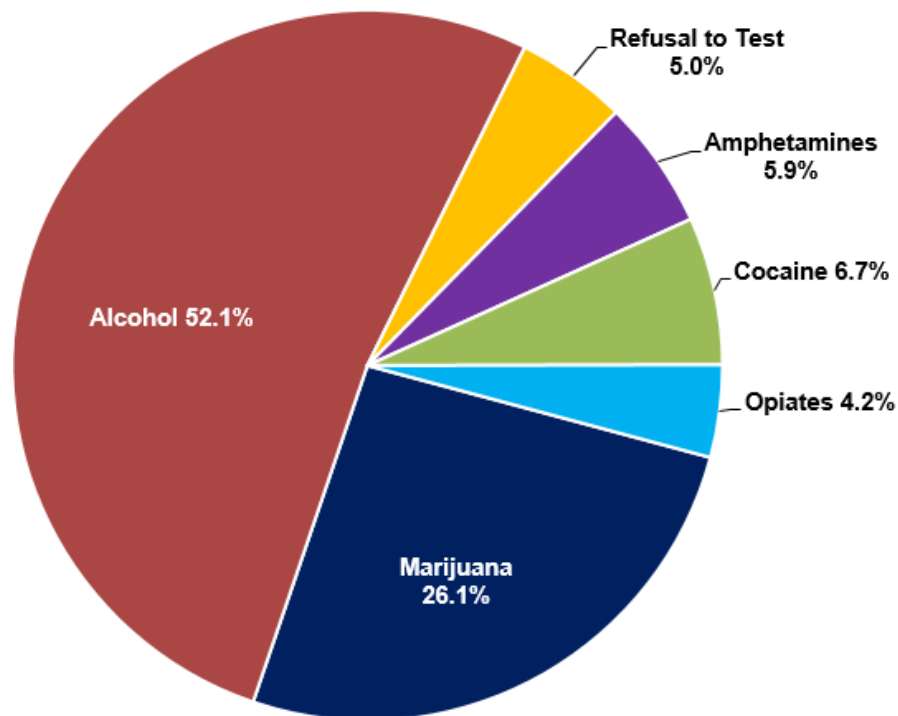
- 90% of positives and testing refusals from contractor/vendors (C/Vs)
- Positives and testing refusals by employment type is very different by test category

Category	Pre-Access	Random	For-Cause
LE	23%	45%	20%
C/V	73%	16%	6%

Results by Employment Type, 2014

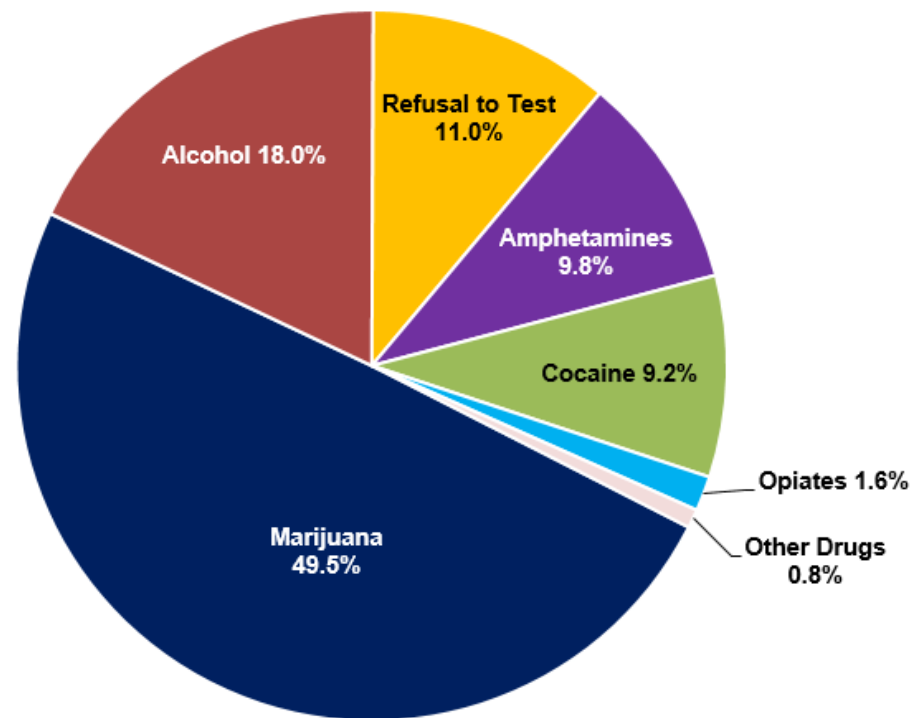
Licensee Employees

(50,928 tested, 118 individuals positive)

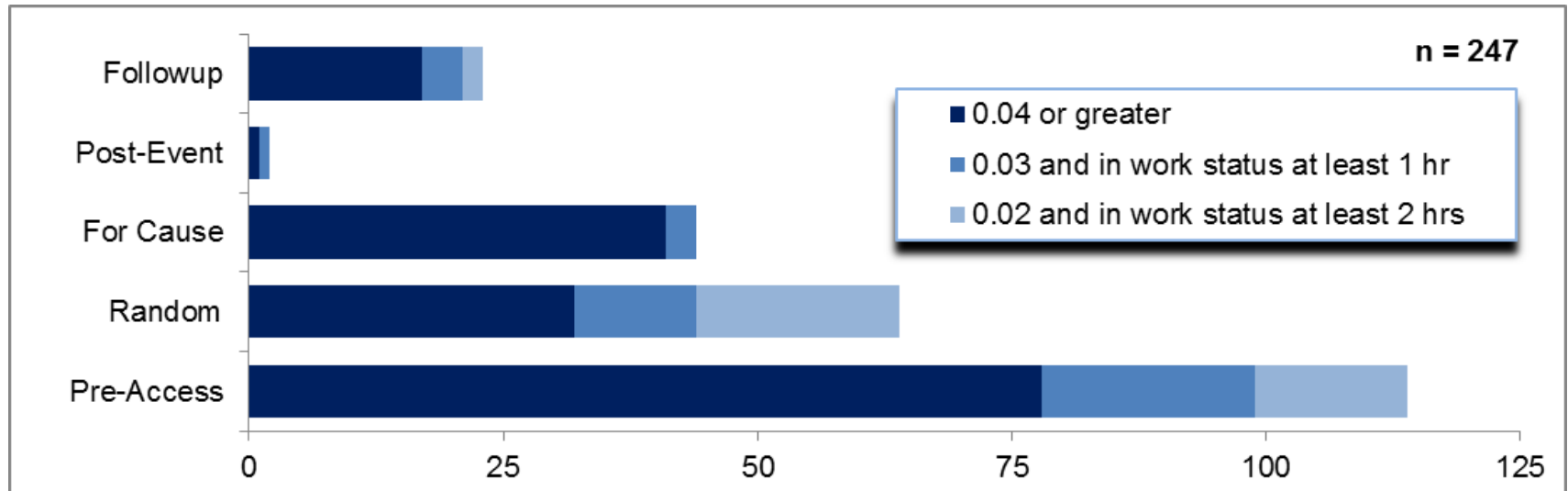


Contractor/Vendors

(115,662 tested, 1,015 individuals positive)

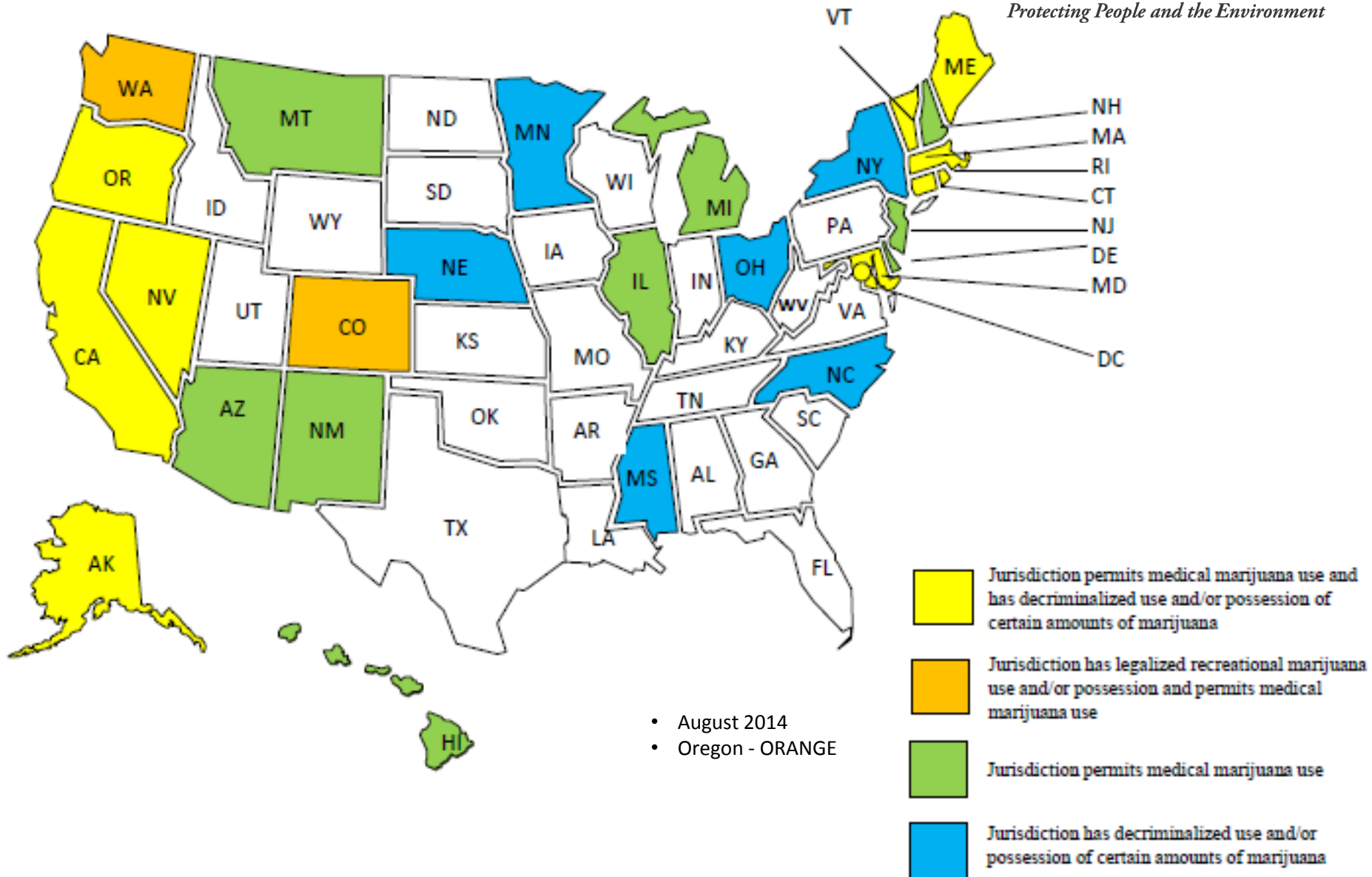


Alcohol Test results by Test Type, 2014



	Pre-Access	Random	For Cause	Post-Event	Followup	Grand Total
0.04 or greater	78	32	41	1	17	169
0.03 and in work status at least 1 hr	21	12	3	1	4	41
0.02 and in work status at least 2 hrs	15	20			2	37
Grand Total	114	64	44	2	23	247

Marijuana in the United States*



Marijuana Key Messages

- 1) Overall positive rates are low; however, marijuana represents a disproportionate number of positives within the scope of 10 CFR Part 26 drug testing.
- 2) Marijuana use is indicative of an individual who is not trustworthy and reliable, because the use, sale, or possession of marijuana is in violation of Federal law.
- 3) There are very few scientifically-established, peer-reviewed, clinical trials that have correlated marijuana use to a level of impairment. See NIDA Science Spotlight, June 23, 2015.
- 4) If DOJ/DEA reschedules marijuana or if State legalization continues, rulemaking and guidance will be necessary.
- 5) Regardless of scheduling, the current staff position is that marijuana use will continue to be prohibited.

Multi-Substance Positives, 2014

	Pre-Access	Random	For Cause	Followup	Grand Total
Amphetamines; Alcohol				1	1
Amphetamines; Cocaine		1	1		2
Amphetamines; Cocaine; Marijuana		1			1
Amphetamines; Marijuana	4				4
Amphetamines; Methamphetamines	12	6	1		19
Amphetamines; Methamphetamines; Cocaine	1				1
Amphetamines; Methamphetamines; Marijuana	3				3
Amphetamines; Methamphetamines; Other: Hydrocodone			1		1
Amphetamines; Opiate: Codeine			1		1
Methamphetamines; Marijuana		1			1
Cocaine; Marijuana	5				5
Cocaine; Opiate: Morphine	1				1
Marijuana; Alcohol	1	1	1		3
Opiate: Codeine; Opiate: Morphine		2			2
Other: Benzodiazepines; Other: Methadone; Marijuana	1				1
Other: Hydrocodone; Other: Oxycodone; Other: Oxymorphone			1		1
Other: Propoxyphene; Marijuana	1				1
Grand Total	29	12	6	1	48

Subversion Attempts, 2012-2014

Subversion attempt is a willful act to avoid being tested, or to bring about an inaccurate test result, or substituting or adulterating a specimen. This definition also includes refusing to provide a specimen, providing inaccurate information, or failing to follow instructions.

An individual identified as having attempted to subvert the testing process is permanently denied authorization to the NRC-licensed facility.

Subversion attempts 2012 – 2014

2012 – 177 of 1,114 violations (15.8% subversion rate)

2013 – 148 of 1,007 violations (14.7% subversion rate)

2014 – 187 of 1,133 violations (16.5% subversion rate)

In 2014

72% of subversion attempts occurred at Pre-Access testing

96% of subversion attempts were made by contractor/vendors

How were individuals identified as subverting the testing process in 2014?

Of the 187 individuals identified as subverting the testing process:

	Pre-Access	Random	For Cause	Followup	Grand Total
Amphetamines	2				2
Amphetamines; Marijuana	1				1
Amphetamines; Methamphetamines	1				1
Cocaine	4	4	1		9
Marijuana	38	6	1	1	46
Marijuana; Other: Methadone; Other: Benzodiazepines	1				1
Marijuana; Other: Propoxyphene	1				1
Methamphetamines		1			1
Opiate: Morphine	1				1
Grand Total	49	11	2	1	63

Part 26 Rulemaking

2008 HHS Guidelines Rulemaking

1. Lower the initial and confirmatory testing cutoffs for amphetamines and cocaine metabolite
2. Broaden the scope of the drug testing panel to include the amphetamine-based street drugs like *Ecstasy*
3. Update the testing of the heroin metabolite 6-acetylmorphine (6-AM)
4. Strengthen the evaluation of subversion attempts – enhances identification and worker protection
5. Require evaluation of time & temperature for specimens that have high pH – enhances worker protection
6. Align definitions and drug testing methodologies with the HHS Guidelines

2016/2017 HHS Guidelines Rulemaking

1. Establish a pro-active, risk-informed, and performance-based regulatory framework
2. Oral fluid and hair specimen testing, and to include semi-synthetic opiates and other impairing drugs
3. Establishing medically-disqualifying drugs: marijuana, synthetic marijuana, cathinones, etc.
4. Broaden the scope of Part 26 to other NRC-licenses
5. Strengthen pre-access testing and better focus for-cause testing and employee training
6. More . . .

NRC Fitness-for-Duty Program Staff



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Questions ?