

Summary of FFD Program Performance Reports for 2005

Since the fitness-for-duty (FFD) rule (10 CFR Part 26) was published, licensees have submitted program performance reports to the NRC as required by 10 CFR 26.71(d). In the past, the NRC published a summary and analysis of calendar year data submitted by the licensee in an annual volume of NUREG/CR-5758, "Fitness for Duty in the Nuclear Power Industry - Annual Summary of Program Performance Reports." The tables below provide the information for calendar year 2005 and summarize data from 1990 to 2004.

Table 1 - 2005 Test Results for Each Test category

TEST CATEGORY	NUMBER OF TESTS	POSITIVE TESTS	PERCENT POSITIVE
Pre-Access	79,005	648	0.82%
Random	50,286	147	0.29%
For-Cause	1,161	106	9.13%
Follow-Up	4,057	31	0.76%
Other	1,193	47	3.94%
TOTAL*	135,702	979	0.72%
TOTAL without OTHER Category	134,509	932	0.69%

*These totals were calculated using Other test category. This category includes results from the periodic testing done by some reporting units during annual physicals or similar periodic activities. Although some reporting units specified the nature of the Other tests (e.g., return to work), most reporting units did not give this information.

Table 2 - Test Results for Each Test Category and Work Category

(January through December 2005)

TEST CATEGORY	LICENSEE EMPLOYEES	LONG-TERM CONTRACTORS	SHORT-TERM CONTRACTORS	TOTAL
Pre-Access				
Number Tested	8,210	767	70,028	79,005
Number Positive	28	12	608	648
Percent Positive	0.34%	1.56%	0.87%	0.82%
Random				
Number Tested	33,587	1,533	15,166	50,286
Number Positive	60	5	82	147
Percent Positive	0.18%	0.33%	0.54%	0.29%
For-Cause				
Number Tested	509	59	593	1,161
Number Positive	19	2	85	106
Percent Positive	3.73%	3.39%	14.33%	9.13%
Follow-Up				
Number Tested	2,099	79	1,879	4,057
Number Positive	15	0	16	31
Percent Positive	0.71%	0.00%	0.85%	0.76%
Other				
Number Tested	548	87	558	1,193
Number Positive	2	0	45	47
Percent Positive	0.36%	0.00%	8.06%	3.94%
TOTAL				
Number Tested	44,953	2,525	88,224	135,702
Number Positive	124	19	836	979
Percent Positive	0.28%	0.75%	0.95%	0.72%
TOTAL without OTHER Category				
Number Tested	44,405	2,438	87,666	134,509
Number Positive	122	19	791	932
Percent Positive	0.27%	0.78%	0.90%	0.69%

Table 3 - 2005 Test Results Test Category

(January through December 2005)

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access			
Number Tested	45,885	33,120	79,005
Number Positive	373	275	648
Percent Positive	0.81%	0.83%	0.82%
Random			
Number Tested	26,866	23,420	50,286
Number Positive	70	77	147
Percent Positive	0.26%	0.33%	0.29%
For-Cause			
<i>Observed Behavior</i>			
Number Tested	352	319	671
Number Positive	68	37	105
Percent Positive	19.32%	11.60%	15.65%
<i>Post-Accident</i>			
Number Tested	233	257	490
Number Positive	0	1	1
Percent Positive	0.00%	0.39%	0.20%
Follow-Up			
Number Tested	2,114	1,943	4,057
Number Positive	15	16	31
Percent Positive	0.71%	0.82%	0.76%
Other			
Number Tested	545	648	1,193
Number Positive	20	27	47
Percent Positive	3.67%	4.17%	3.94%
TOTAL			
Number Tested	49,129	36,287	85,416
Number Positive	476	356	832
Percent Positive	0.97%	0.98%	0.97%
TOTAL without OTHER Category			
Number Tested	75,450	59,059	134,509
Number Positive	526	406	932
Percent Positive	0.70%	0.69%	0.69%

Table 4 - 2005 Test Results for Licensee Employees and Contractor Personnel

(January through December 2005)

	LICENSEE EMPLOYEE			LONG-TERM CONTRACTORS			SHORT-TERM CONTRACTORS		
TEST CATEGORY	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year
Pre-Access									
Number Tested	4,827	3,383	8,210	404	363	767	40,654	29,374	70,028
Number Positive	19	9	28	5	7	12	349	259	608
Percent Positive	0.39%	0.27%	0.34%	1.24%	1.93%	1.56%	0.86%	0.88%	0.87%
Random									
Number Tested	17,897	15,690	33,587	753	780	1,533	8,216	6,950	15,166
Number Positive	30	30	60	2	3	5	38	44	82
Percent Positive	0.17%	0.19%	0.18%	0.27%	0.38%	0.33%	0.46%	0.63%	0.54%
For-Cause									
<i>Observed Behavior</i>									
Number Tested	155	154	309	8	8	16	189	157	346
Number Positive	11	8	19	0	2	2	57	27	84
Percent Positive	7.10%	5.19%	6.15%	0.00%	25.00%	12.50%	30.16%	17.20%	24.28%
<i>Post-Accident</i>									
Number Tested	106	94	200	20	23	43	107	140	247
Number Positive	0	0	0	0	0	0	0	1	1
Percent Positive	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.40%
Follow-Up									
Number Tested	1,054	1,045	2,099	39	40	79	1,021	858	1,879
Number Positive	6	9	15	0	0	0	9	7	16
Percent Positive	0.57%	0.86%	0.71%	0.00%	0.00%	0.00%	0.88%	0.82%	0.85%
Other									
Number Tested	281	267	548	36	51	87	228	330	558
Number Positive	1	1	2	0	0	0	19	26	45
Percent Positive	0.36%	0.37%	0.36%	0.00%	0.00%	0.00%	8.33%	7.88%	8.06%
TOTAL									
Number Tested	24,320	20,633	44,953	1,260	1,265	2,525	50,415	37,809	88,224
Number Positive	67	57	124	7	12	19	472	364	836
Percent Positive	0.28%	0.28%	0.28%	0.56%	0.95%	0.75%	0.94%	0.96%	0.95%
TOTAL w/o OTHER Category									
Number Tested	24,039	20,366	44,405	1,224	1,214	2,438	50,187	37,479	87,666
Number Positive	66	56	122	7	12	19	453	338	791
Percent Positive	0.27%	0.27%	0.27%	0.57%	0.99%	0.78%	0.90%	0.90%	0.90%

Table 5 - 2005 Number of Confirmed Positives by Substance

(January through December 2005)						
	FIRST SIX MONTHS		SECOND SIX MONTHS		TOTAL	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent	Number	Percent
Marijuana	240	44.86%	192	46.15%	432	45.43%
Cocaine	140	26.17%	106	25.48%	246	25.87%
Opiates	7	1.31%	9	2.16%	16	1.68%
Amphetamines	40	7.48%	19	40.57%	59	6.20%
Phencyclidine	1	0.19%	1	0.24%	2	0.21%
Alcohol	107	20.00%	89	21.39%	196	20.61%
TOTAL	535		416		951	

Table 6 - 2005 Confirmed Positive Test Results by Substance and Work Category

(January through December 2005)				
	LICENSEE EMPLOYEES		CONTRACTORS (Long-Term/Short-Term)	
TYPE OF SUBSTANCE	Number	Percent	Number	Percent
Marijuana	35	29.66%	397	47.66%
Cocaine	22	18.64%	224	26.89%
Opiates	3	2.54%	13	1.56%
Amphetamines	6	5.08%	53	6.36%
Phencyclidine	0	0.00%	2	0.24%
Alcohol	52	44.07%	144	17.29%
TOTAL	118		833	

Table 7 - Significant Fitness-for-Duty Events (1990-1999)

Type of Event	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Reactor Operators	19	16	18	8	7	8	8	9	5	5	103
Licensee Supervisors	26	18	22	25	11	16	19	16	10	2	165
Contract Supervisors	12	24	28	16	11	10	8	10	10	12	141
FFD Program Personnel	1	5	0	0	1	0	2	0	3	2	14
Substances Found	6	8	6	2	0	5	5	4	0	2	38
Adulterated Specimen											0
Total	64	71	74	51	30	39	42	39	28	23	461

Table 7 - Cont'd Significant Fitness-for-Duty Events (2000 - 2005)

Type of Event	2000	2001	2002	2003	2004	2005	Total
Reactor Operators	5	4	3	6	9	5	32
Licensee Supervisors	11	9	3	3	7	13	46
Contract Supervisors	8	12	12	8	4	14	58
FFD Program Personnel	0	0	3	0	0	1	4
Substances Found	3	0	1	2	9	9	24
Adulterated Specimen				9	23	29	61
Total	27	25	22	28	52	71	225

Table 8 - Trends in testing by test type (1990 - 1999)

Type of Test	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Pre-Access											
Number Tested	122,491	104,508	104,842	91,471	80,217	79,305	81,041	84,320	69,146	69,139	886,480
Number Positive	1,548	983	1,110	952	977	1,122	1,132	1,096	822	934	10,676
Percent Positive	1.26%	0.94%	1.06%	1.04%	1.22%	1.41%	1.40%	1.30%	1.19%	1.35%	1.20%
Random											
Number Tested	148,743	153,818	156,730	146,605	78,391	66,791	62,307	60,829	56,969	54,457	985,640
Number Positive	550	510	461	341	223	180	202	172	157	140	2,936
Percent Positive	0.37%	0.33%	0.29%	0.23%	0.28%	0.27%	0.32%	0.28%	0.28%	0.26%	0.30%
For-Cause											
Number Tested	732	727	696	751	758	763	848	722	720	736	7,453
Number Positive	214	167	178	163	122	139	138	149	100	120	1,490
Percent Positive	29.23%	22.97%	25.27%	21.70%	16.09%	18.22%	16.27%	20.64%	13.89%	16.30%	20.00%
Followup											
Number Tested	2,633	3,544	4,283	4,139	3,875	3,262	3,262	3,296	2,863	3,008	34,165
Number Positive	65	62	69	56	50	35	40	31	43	30	481
Percent Positive	2.47%	1.75%	1.61%	1.35%	1.29%	1.07%	1.23%	0.94%	1.50%	1.00%	1.41%
TOTAL*											
Number Tested	274,599	262,597	266,551	242,966	163,241	150,121	147,458	149,167	129,698	127,340	1,913,738
Number Positive	2,377	1,722	1,818	1,512	1,372	1,476	1,512	1,448	1,122	1,224	15,583
Percent Positive	0.87%	0.66%	0.68%	0.62%	0.84%	0.98%	1.03%	0.97%	0.87%	0.96%	0.81%

* Does not include test results from the "Other" test category.

Table 8 - Cont'd Trends in testing by test type (2000 - 2005)

Type of Test	2000	2001	2002	2003	2004	2005	Total
Pre-Access							
Number Tested	68,333	63,744	73,155	72,988	76,119	79,005	433,344
Number Positive	965	720	805	757	737	648	4,632
Percent Positive	1.41%	1.13%	1.10%	1.04%	0.97%	0.82%	1.07%
Random							
Number Tested	51,955	50,080	49,741	49,402	51,239	50,286	302,703
Number Positive	204	148	114	132	127	147	871
Percent Positive	0.39%	0.30%	0.23%	0.27%	0.25%	0.29%	0.29%
For-Cause							
Number Tested	883	730	1,072	1,052	1,159	1,161	6,053
Number Positive	138	101	112	126	139	106	721
Percent Positive	15.67%	13.84%	10.45%	11.98%	11.99%	9.13%	11.91%
Followup							
Number Tested	2,861	2,649	2,892	3,142	3,752	4,057	19,314
Number Positive	49	35	21	42	31	31	209
Percent Positive	1.71%	1.32%	0.73%	1.34%	0.83%	0.76%	1.08%
TOTAL*							
Number Tested	124,032	118,730	128,321	127,785	132,269	134,509	764,701
Number Positive	1,356	1,036	1,091	1,094	1,034	932	6,538
Percent Positive	1.09%	1.004	0.85%	0.86%	0.78%	0.69%	0.85%

* Does not include test results from the "Other" test category.

Table 9 - Trends In Substances Identified (1990 - 1999)

Substance	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Marijuana	1,153	746	953	781	739	819	868	842	606	672
Cocaine	706	549	470	369	344	374	352	336	269	273
Alcohol	452	401	427	357	251	265	281	262	212	230
Amphetamines	69	31	31	51	54	61	53	49	46	40
Opiates	45	24	8	13	11	17	14	39	19	16
Phencyclidine	8	11	4	5	1	7	2	0	1	2
Total*	2,433	1,762	1,893	1,576	1,400	1,543	1,570	1,528	1,153	1,233

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 9 - Cont'd Trends In Substances Identified (2000 - 2005)

Substance	2000	2001	2002	2003	2004	2005
Marijuana	620	523	560	518	514	432
Cocaine	251	225	228	228	247	246
Alcohol	211	212	214	199	222	196
Amphetamines	50	50	47	64	60	59
Opiates	32	17	21	17	14	16
Phencyclidine	1	2	3	0	1	2
Total*	1,168	1,029	1,069	1,026	1,056	951

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 10 - Trends In Positive Test Rates For Workers With Unescorted Access (1990 - 2005)*

Year	Positive Test Rate
1990	0.54%
1991	0.47%
1992	0.44%
1993	0.37%
1994	0.48%
1995	0.50%
1996	0.57%
1997	0.54%
1998	0.50%
1999	0.50%
2000	0.70%
2001	0.53%
2002	0.46%
2003	0.56%
2004	0.51%
2005	0.49%
*Includes random, for-cause, testing results. The reduction in random test rate from 100% to 50% has been in effect since 1994.	